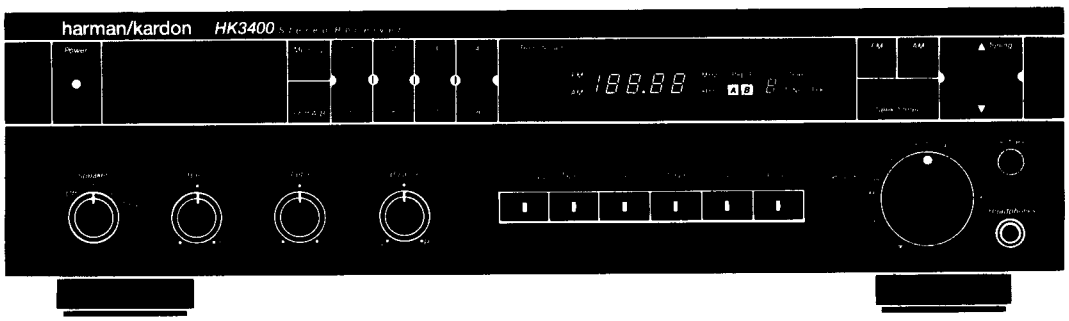
The Harman Kardon Model HK3400

Manual 168B

STEREO RECEIVER

Technical Manual



This manual is to be applied to the North America area model with serial number S189-04202 and above, and International and Australia models.

The following marks found in the parts list of this manual identify the models as follows.

- (BK) : North America area model Black version
- (I) : International model
- (IB) : International model Black version
- (BB) : Australia model Black version

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harman/kardon

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SPECIFICATIONS

	Nominal	Limit
● FM SECTION		
Tuning Range	87.5 ~ 108.0MHz	
50dB Quieting Sensitivity		
Mono	15.2dBf	≦ 19dBf
	15.2dBf	≦ 27dBf (I) (IB) (BB)
Stereo	38dBf	≦ 41dBf
	38dBf	≦ 50dBf (I) (IB) (BB)
Usable Sensitivity	11.2dBf	≦ 15dBf
	11.2dBf	≦ 17dBf (I) (IB) (BB)
Image Ratio	45dB	≧ 40dB
IF Rejection	105dB	≧ 80B
Spurious Response Rejection	80dB	
Capture Ratio	1.3dB	≦ 2.0dB
Alternate Channel Selectivity	77dB	≧ 60dB
AM Rejection	60dB	≧ 45dB
Signal to Noise Ratio		
Mono	80.5dB	≧ 76dB
	80.5dB	≧ 70dB (I) (IB) (BB)
Stereo	73dB	≧ 68dB
	73dB	≧ 62dB (I) (IB) (BB)
Total Harmonic Distortion (65dBf 1kHz Input)		
Mono	0.09%	≧ 0.3%
Stereo	0.12%	≧ 0.4%
Stereo Separation at 1kHz	55dB	≧ 42dB
	55dB	≧ 35dB (I) (IB) (BB)
● AM SECTION		
Tuning Range	530 ~ 1,710kHz	
	531 ~ 1,602kHz (I) (IB) (BB)	
Usable Sensitivity		
	400 μVm	≦ 700 μVm
Selectivity	35dB	≧ 25dB
Signal to Noise Ratio	52dB	≧ 47dB
Image Rejection	39dB	≧ 30dB
IF Rejection	63dB	≧ 50dB
● AUDIO SECTION		
Usable Sensitivity		
Video/CD (at 35W Output)	135mV	± 25mV
(at 25W Output)	115mV	± 25mV (I) (IB) (BB)
Phono	2.2mV	± 0.2mV
Signal to Noise Ratio		
Video/CD	80dB	≧ 75dB
Phono	80dB	≧ 73dB

	Nominal	Limit
Channel Separation at 10kHz		
Video/CD	63dB	≧ 45dB
Phono	71.3dB	≧ 45dB
IM Distortion Ratio	0.047%	≦ 0.1%
RMS Output Power		
8Ω, 1kHz, THD 0.1%	46.8W	≧ 35W
	46.8W	≧ 25W (I) (IB) (BB)
4Ω, 1kHz, THD 0.3%	48.8W	≧ 35W
High Instantaneous Current Capability (HICC)	26.4A	≧ 20A
Damping Factor at 1kHz	84	≧ 60
Tone Control Characteristics		
Bass at 50Hz		
Boost	11dB	± 2dB
Cut	−11dB	± 2dB
Treble at 10kHz		
Boost	11dB	± 2dB
Cut	−11dB	± 2dB
Loudness Control at 50Hz	10dB	± 2dB
DC Output Voltage		
L channel	34mV	± 60mV
R channel	24mV	± 60mV
RIAA Equalization at Tape Out (20Hz/20kHz)	0.1dB±0.5dB/0.2dB±0.5dB	
● DIMENSIONS (W x H x D)	17-3/8" x 5 x 13-3/4" (443 x 126 x 349 mm)	
● WEIGHT	15.4 lbs. (7 kg)	
● POWER SUPPLY	AC120V, 60Hz	
	AC230V/240V, 50/60Hz (I) (IB) (BB)	
● POWER CONSUMPTION	210W (240VA)	

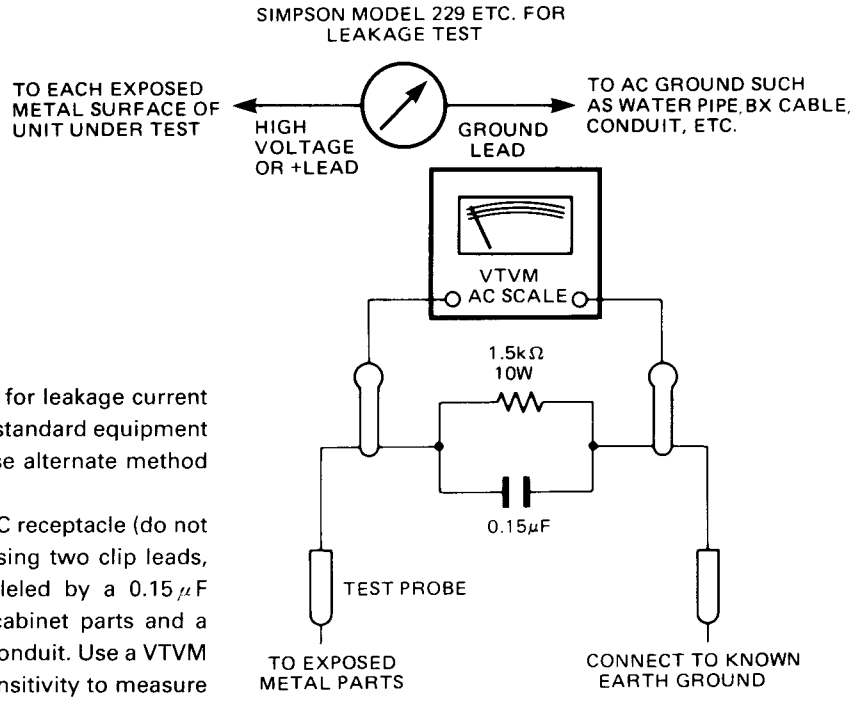
These specifications are Service target specs.

Specifications and components subject to change without notice.
Overall performance will be maintained or improved.

LEAKAGE TEST (FOR SERVICE ENGINEERS IN THE U.S.A.)

Before returning the unit to the user, perform the following safety checks:

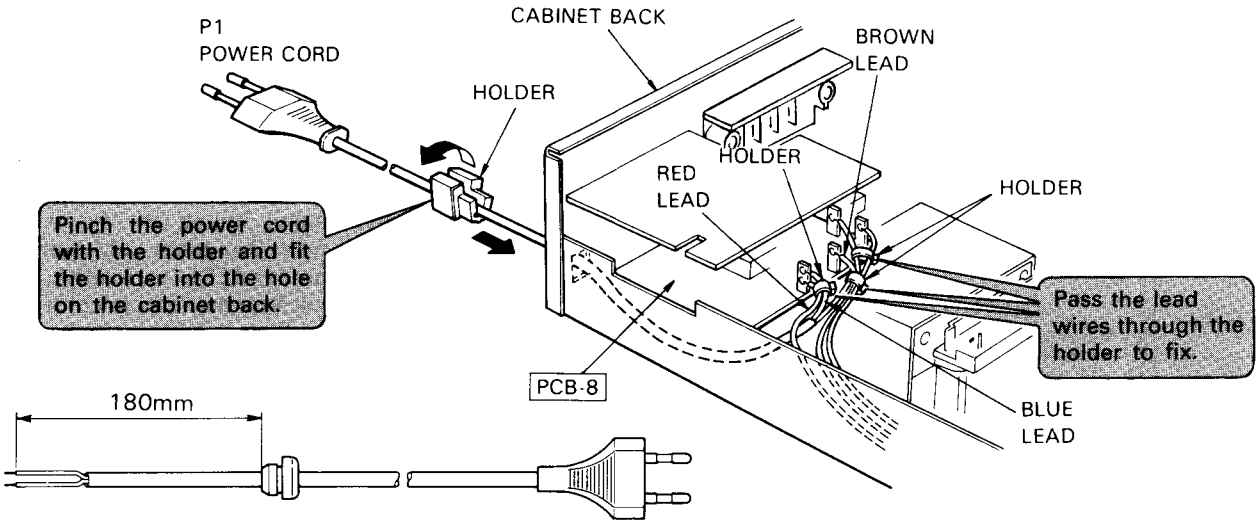
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.
2. Replace all protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows:



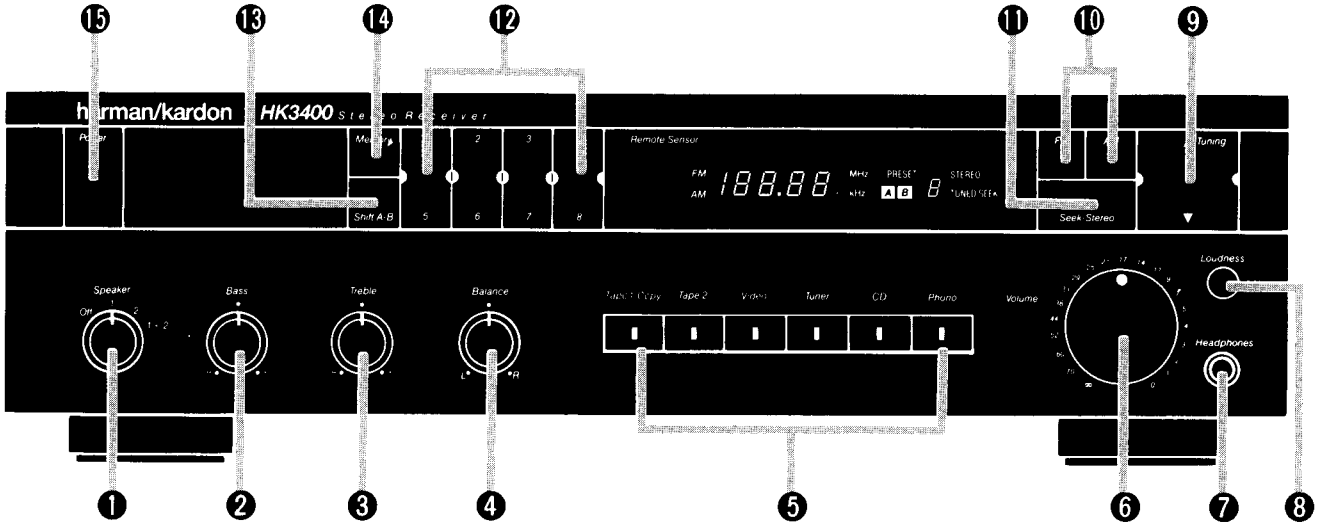
Plug the AC line cord directly into a 120-volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a 1500 ohm, 10-watt resistor paralleled by a 0.15 μF capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See Diagram.) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the On and Off positions.) A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.

POWER CORD REPLACEMENT (FOR SERVICE ENGINEERS OTHER THAN NORTH AMERICA)

In order to prevent file or shock hazard when replacing the power cord, follow the procedure below to replace the parts with the standard supply parts.



CONTROLS & FUNCTIONS



❶ Speaker
Turn to select either of two sets of speakers, or both, or neither (headphone output only).

❷ Bass
Turn to increase or decrease the proportion of low frequency sound.

❸ Treble
Turn to increase or decrease the proportion of high frequency sound.

❹ Balance
Turn to adjust relative output level of left and right speakers.

❺ Function Selector
Select desired input source by pressing the corresponding key.

❻ Volume
Turn to raise or lower output volume.

❼ Headphone Jack
Plug in headphones if desired. (With Speaker switch in Off position, output is supplied only to headphones.)

❽ Loudness
Press to improve sound quality when listening to your system at low volume.

❾ Tuning
Press ▲ to tune to stations with higher frequencies; press ▼ for lower frequencies.

❿ FM/AM
Press to select FM or AM reception.

⓫ Seek-Stereo
Press to select Seek tuning in stereo, or manual tuning in mono.

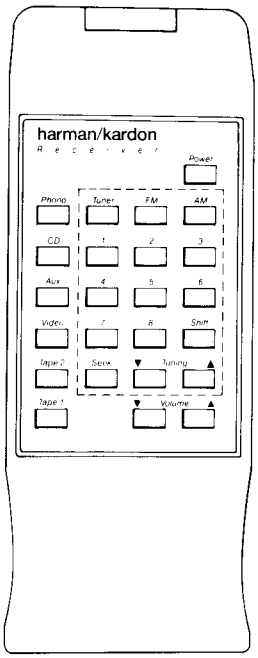
⓬ Preset Buttons
Press to access pre-selected stations.

⓭ Shift A-B
Allows you to access 16 pre-selected stations using the 8 preset buttons.

⓮ Memory
Press to set a new preset station in memory.

⓯ Power
Press to turn the unit on and off.

REMOTE CONTROL



Independent Remote Control

The keys on the remote control unit function the same as the corresponding buttons on the receiver itself, except for the power switch.
The power switch on the receiver turns the unit On and Off. The switch on the remote control switches the receiver from On (green LED illuminates on receiver power switch) to Standby (amber LED), as follows.
When power is On, pressing the power switch on the remote control puts the receiver in Standby mode. From this mode, the receiver can be turned back on from the remote control.
When power is Off, the receiver can be turned on only from the unit itself, not from the remote control.

Operating Conditions

The control unit operates effectively within a distance of 7 meters (23 feet) and an angle of 30° from the receiver. Using the control near fluorescent lights may shorten this range, as will any dust or dirt that accumulates on the front of the remote control, or the "Remote Sensor" area of the receiver. Also avoid blocking the line of sight between receiver and remote.
The control unit is powered by two AA batteries, included with your receiver.
When you replace weak batteries, replace both at the same time. When the remote is to be unused for an extended period, remove the batteries to prevent damage from corrosion.

DISASSEMBLY PROCEDURES (REFER TO PAGES 9 THROUGH 13)

[1] CABINET TOP (127) REMOVAL

Remove 6 screws (A) and then remove the Cabinet Top (127).

[2] FRONT PANEL ASSEMBLY (AA) REMOVAL

1. Remove the Cabinet Top (127), referring to the previous step [1].
2. Disconnect the (CW15) from (CN15) on the Tuner P.C. Board (PCB-1).
3. Pull out the Volume Knob (139) with the Volume Indicator P.C. Board (PCB-16).
4. Disconnect the (CW100) from (CN100) on the Trans Terminal P.C. Board (PCB-13).
5. Disconnect the (JL101, JL804) from (CN101A, CN804B) on the Tuner P.C. Board (PCB-1).
6. Remove 3 screws (B) and 3 screws (C) and then remove the Front Panel Assembly (AA).

[3] FRONT P.C. BOARD (PCB-14) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Remove 11 screws (D) and then remove the Front P.C. Board (PCB-14).

[4] TONE CONTROL P.C. BOARD (PCB-6) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Pull out the Bass, Treble and Balance Knobs (140).
3. Remove the 3 nuts (E) and then remove the Tone Control P.C. Board (PCB-6).
4. Disconnect the (CW401) from (CN401) on the Tone Control P.C. Board (PCB-6).
5. If necessary, unsolder the lead wires.

[5] VOLUME P.C. BOARD (PCB-7) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Disconnect the (CW504) from (CN504) on the Tuner P.C. Board (PCB-1).
3. Remove the 1 nut (F) and then remove the Volume P.C. Board (PCB-7).
4. If necessary, unsolder the lead wires.

[6] HEADPHONE P.C. BOARD (PCB-10) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Pull out the Loudness Button (151).
3. Remove 2 screws (G) and then remove the Headphone P.C. Board (PCB-10).
4. If necessary, unsolder the lead wires.

[7] SPEAKER SWITCH P.C. BOARD (PCB-11) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Pull out the Speaker Knob (140).
3. Remove 1 nut (H) and then remove the Speaker Switch P.C. Board (PCB-11).
4. If necessary, unsolder the lead wires.

[8] POWER SWITCH P.C. BOARD (PCB-15) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step [2].
2. Pull out the Power Indicator P.C. Board (PCB-17) with the Holder (187).
3. Remove 2 screws (I) and then remove the Power Switch P.C. Board (PCB-15).
4. Open the lid of connector (CN11) on the Power Switch P.C. Board (PCB-15) and then disconnect the lead wire.

[9] TUNER P.C. BOARD (PCB-1) REMOVAL

1. Remove the Cabinet Top (127), referring to the previous step [1].
2. Disconnect the (CW15, CW102, CW504) from (CN15, CN102, CN504) on the Tuner P.C. Board (PCB-1).
3. Open the lid of connectors (CN12, CN501) on the Tuner P.C. Board (PCB-1) and then disconnect the lead wire.
4. Remove 3 screws (C) and 8 screws (J) and then remove the Front Panel Assembly and Chassis.
5. Remove 10 screws (K) and then remove the Tuner P.C. Board (PCB-1), Equalizer P.C. Board (PCB-2) and Monitor P.C. Board (PCB-3).
6. If necessary, unsolder the lead wires.
7. Pull out the Equalizer P.C. Board (PCB-2).
8. Pull out the Monitor P.C. Board (PCB-3).

[10] SUB WOOFER BOARD (PCB-4) REMOVAL

1. Remove the Cabinet Top (127), referring to the previous step [1].
2. Remove 2 screws (L) and then remove the Sub Woofer P.C. Board (PCB-4).
3. Open the lid of connector (CN104) on the Sub Woofer P.C. Board (PCB-4).
4. If necessary, unsolder the lead wires.

[11] SPEAKER TERMINAL P.C. BOARD (PCB-12) REMOVAL

1. Remove the Cabinet Top (127), referring to the previous step [1].
2. Remove 2 screws (M) and then remove the Speaker Terminal P.C. Board (PCB-12).

[12] MAIN P.C. BOARD (PCB-5) REMOVAL

1. Remove the Speaker Terminal P.C. Board (PCB-12), referring to the previous step [11].
2. Remove 5 screws (N) and then remove the Main P.C. Board (PCB-5) with Metal Fittings (167, 168).
3. If necessary, unsolder the lead wires.

[13] SECONDRY P.C. BOARD (PCB-9) REMOVAL

1. Remove the Cabinet Top (127), referring to the previous step [1].
2. Remove 6 screws (O) and then remove the Power Transformer (T1) with Secondry P.C. Board (PCB-9) and Trans Terminal P.C. Board (PCB-13).

[14] PRIMARY P.C. BOARD (PCB-8) REMOVAL

1. Remove the Secondry P.C. Board (PCB-9), referring to the previous step [13].
2. Remove 2 screws (P) and then remove the Primary P.C. Board (PCB-8).

CIRCUIT DESCRIPTION

■FM TUNER SECTION

The FM signal which has entered through the antenna is high-frequency amplified in the front end. Then it is mixed with the output of the local oscillators and converted into the 10.7MHz intermediate-frequency.

The 10.7MHz signal is amplified in the intermediate frequency amplifying section which consists of CF201, Q201, CF202, Q202 and CF203 and fed to pin 1 of IC201. In IC201, the signal is sent through the IF amplifier and after being detected in the quadrature, it is sent through the post amplifier to pin 12 and then input to pin 2 of IC301. In IC301, the pilot signal is detected out of the signal which has been fed and 38kHz signal is produced. Then by this signal, stereo signal is demodulated, output from pin 4 for the left channel and from pin 7 for the right channel and transmitted to the input selector section.

■AM TUNER SECTION

The AM signal which has entered through the antenna passes through the tuning circuit consisting of CB251 and is inputted to pin 21 of IC201. In IC201, it undergoes radio-frequency amplification and local oscillation and is output from pin 20, and passed through the transformer (T251) and ceramic filter (CF252) and enters pin 18 of IC201. It is then passed through the IF amplification and detection and is output from pin 15. This signal is fed to IC301.

■AUDIO AMPLIFIER SECTION

The signal which has entered from each input terminal is selected by the input selector, passes through the balance circuit, volume and loudness circuit and is fed into the pre-amplifier.

Then it is fed into the power amplifier through the tone control circuit, power is amplified and transmitted to the speaker terminal.

The power amplifier has an over-output protective circuit. If current exceeding the specification flows to Q419, Q421 (L ch), Q420, Q422 (R ch), it is detected at Q27 (L ch) and Q28 (R ch) and the protective circuit consisting of Q22 and Q24 draws in Q23 and Q29, and thus the input signal is cut to protect the circuit.

■MUTING CIRCUIT

If FM or AM is received out of tuning or in a very weak field intensity, pin 31 of IC701 becomes high level. This is fed to the base of Q707, whose collector then becomes low level and the collector of Q708 high level. As a result, Q301 (L ch) and Q302 (R ch) are conducted to mute the output.

■SYNTHESIZER SECTION

●FM

The local oscillation output at the front end is fed to pin 21 of the prescaler IC702 and after being frequency divided into 30 or 32, control output signal if fed from IC701, compared with the divided local oscillation output and output to pin 16. This voltage is level converted at Q701 and Q702, and fed to the front end.

●AM

The local oscillation output is fed from pin 24 of IC201 to pin 19 of IC702. In IC702, control output signal is fed from IC701, compared with the local oscillation output and output to pin 16. This voltage is level converted at Q701 and Q702, and fed to the AM local oscillation section.

■INDICATOR SECTION

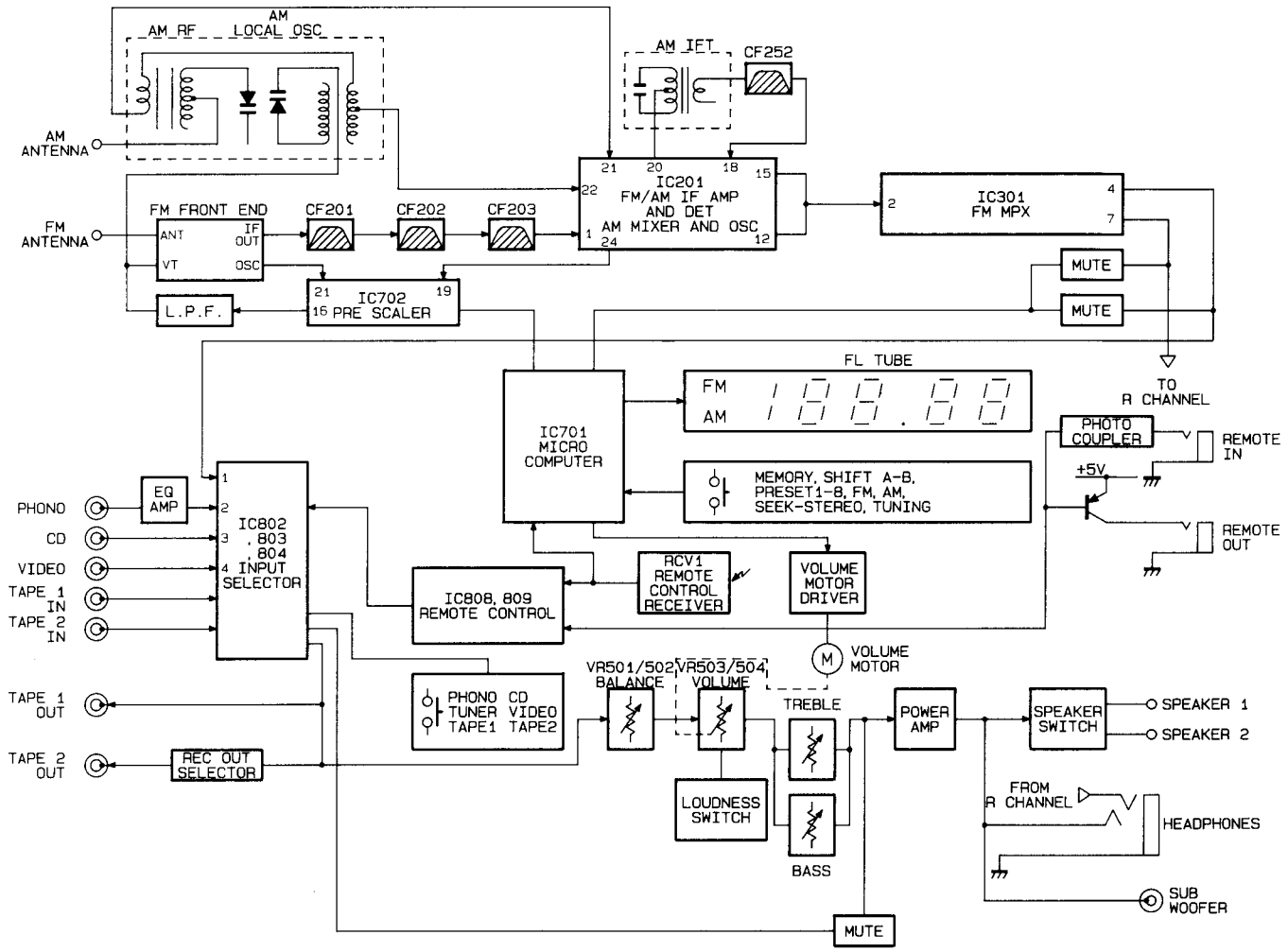
●Frequency display

The indicator tube is turned ON by the output decoded in IC701.

●Tuning

When broadcast is received, Q711 turns ON by the control signal in IC301 and "Tuned" of the indicator tube is turned ON. When FM or stereo broadcast is received, pin 9 of IC301 becomes low level, Q712 turns ON and "Stereo" of the indicator tube is turned ON.

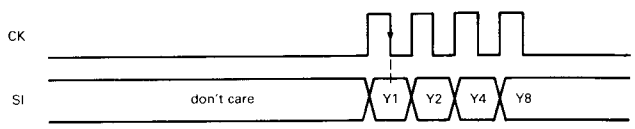
BLOCK DIAGRAM



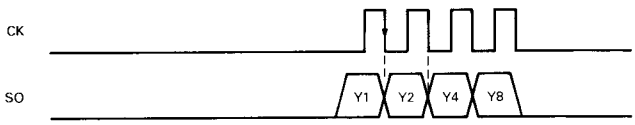
TIMING CHART

Frequency display timing chart of IC701 (TC9301AN-027)

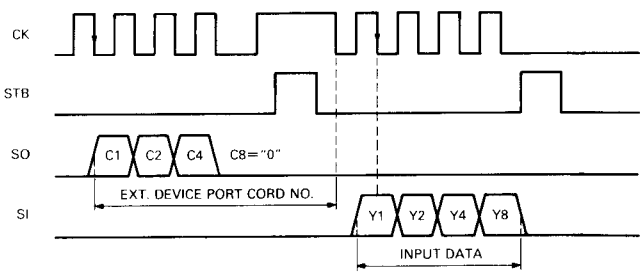
NCD MODE INPUT TIMING



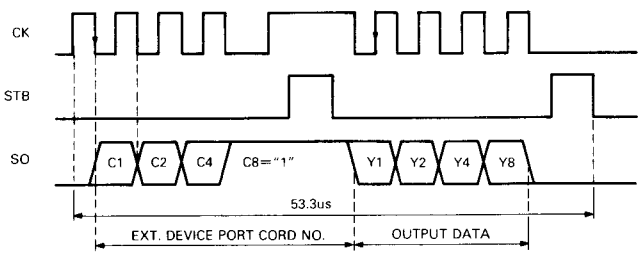
NCD MODE OUTPUT TIMING



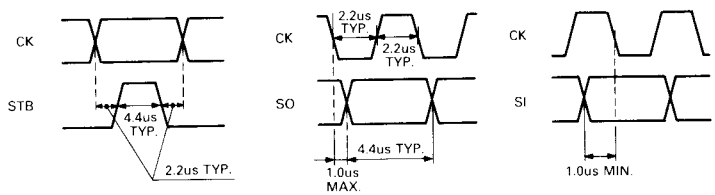
$\overline{\text{NCD}}$ MODE INPUT TIMING



$\overline{\text{NCD}}$ MODE OUTPUT TIMING



SERIAL TIMING PULSE WIDTH



ALIGNMENT PROCEDURES (REFER TO PAGES 14 THROUGH 17 AND 28 THROUGH 32)

Conditions:
- Set the Volume control to minimum.
- Set the Speaker switches to 1 position.
- Set the Speaker Operating Mode switch to "8Ω" position.
- Make the adjustment at a room temperature of 77°F (25°C).
- After the Power switch is pushed on, wait for 30 minutes before measuring to be sure of the most stable operation.

■ IDLING CURRENT ADJUSTMENT

Step	Terminal to be Connected	Adjustment	For
1	Connect the Digital Volt Meter to TP401 and TP403.	VR401 (L ch)	40mV ±2mV
2	Connect the Digital Volt Meter to TP402 and TP404.	VR402 (R ch)	40mV ±2mV

■ AM ADJUSTMENT

Conditions:
- Set the AM mode by pressing the "AM" button.
- Set the Seek switch to off (put out seek indicator) position.
- Standard modulation of the AM signal Generator is 400Hz at 30%.

Step	Alignment	Terminal to be Connected	Measurement Frequency	Station Display	Adjustment	For
1	IF	• Connect the AM Test Loop Antenna cable into the output jack of AM Signal Generator (80 dBμV signal). Place AM Test Loop Antenna close enough to couple signal into the AM Loop Antenna. • Connect the VTVM and oscilloscope to the OUTPUT jacks.	1400kHz ※1404kHz	1400kHz ※1404kHz	T251	Maximum output level and symmetrical curve on scope.
2	Tracking		600kHz ※603kHz	600kHz ※603kHz	CB251	Maximum output.

※International and Australia models

■ FM ADJUSTMENT

Conditions:
- Set the FM mode by pressing the "FM" button.
- Set the Seek switch to off (put out seek indicator) position.

FM Signal Generator	1kHz, 75kHz modulation ※1kHz, 40kHz modulation
Stereo Modulator	L+R=45.5%, L−R=45.5%, 19kHz=9% ※L+R=22.5%, L−R=22.5%, 19kHz=8%

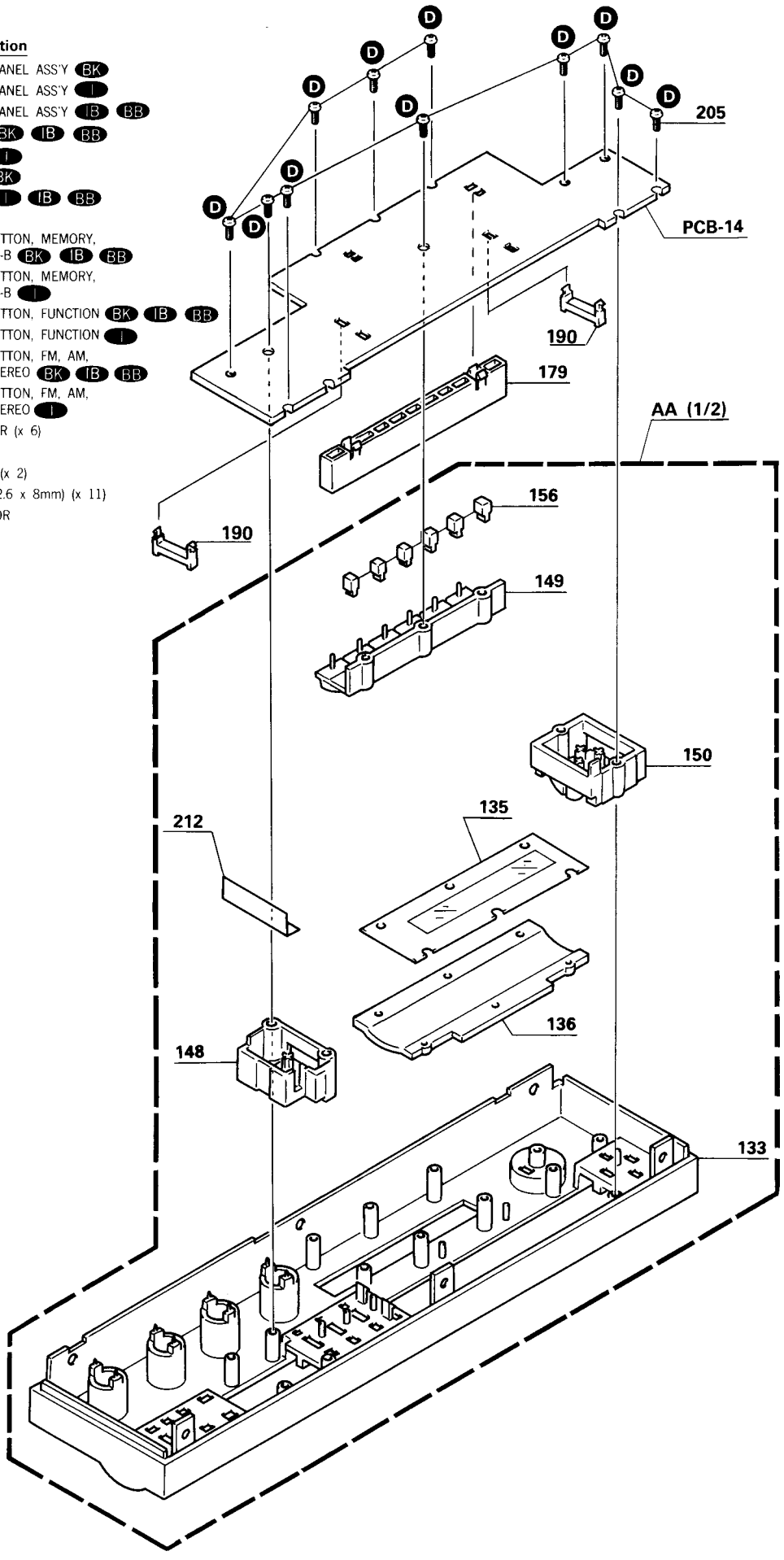
※International and Australia models

Step	Alignment	Terminal to be Connected	Measurement Frequency	Station Display	Adjustment	For
1	Discriminator	• Connect the FM Signal Generator to FM 300Ω BAL Antenna terminals through the 300Ω balanced dummy. [1mV(65dBf) input signal] • Connect the Oscilloscope and Distortion meter to the Tape 1 OUTPUT jacks. • Set the Seek switch to on (seek indicator lights) position.	97.9MHz	97.9MHz	T201(A)	Adjust so that the TUNED indicator lights in the same range on both plus (+) and minus (−) sides of 97.9 MHz.
2			97.9MHz	97.9MHz	T201(B)	Minimum distortion.
3			Repeat steps 1 and 2 for optimum sensitivity.			
4	Muting level		97.9MHz	97.9MHz	VR201	Adjust VR201 so that the waveform is disappear at 30 dBf input.
5	Separation	• Connect the Stereo Modulator to FM Signal Generator. Connect FM Signal Generator to FM 300Ω BAL Antenna terminal through the 300Ω balanced dummy. (65 dBf input signal) • Connect the VTVM and Oscilloscope to the Tape 1 OUTPUT jacks.	97.9MHz	97.9MHz	VR301	Adjust so that the left channel output becomes minimum when only the right channel of the Stereo Modulator is modulated.
					VR301	Adjust so that the right channel output becomes minimum when only the left channel of the Stereo Modulator is modulated.

GENERAL UNIT PARTS LIST

Ref. No.	Part No.	Description
AA	A442-HK3400B	FRONT PANEL ASS'Y (BK)
AA	A442-HK3400E	FRONT PANEL ASS'Y (I)
AA	A442-HK3400C	FRONT PANEL ASS'Y (IB) (BB)
133	1442-25604	PANEL (BK) (IB) (BB)
133	1442-25603	PANEL (I)
135	1511-19805	PLATE (BK)
135	1511-19809	PLATE (I) (IB) (BB)
136	1532-17505	WINDOW
148	1662-59004	PUSH BUTTON, MEMORY, SHIFT A-B (BK) (IB) (BB)
148	1662-59003	PUSH BUTTON, MEMORY, SHIFT A-B (I)
149	1662-62302	PUSH BUTTON, FUNCTION (BK) (IB) (BB)
149	1662-62301	PUSH BUTTON, FUNCTION (I)
150	1662-62402	PUSH BUTTON, FM, AM, SEEK-STEREO (BK) (IB) (BB)
150	1662-62401	PUSH BUTTON, FM, AM, SEEK-STEREO (I)
156	1732-08101	INDICATOR (x 6)
179	2240-7376	HOLDER
190	2240-7386	HOLDER (x 2)
205	2347-R0126082	SCREW (2.6 x 8mm) (x 11)
212	2224-7135	INSULATOR

GENERAL UNIT
EXPLODED VIEW (FRONT PANEL ASS'Y)



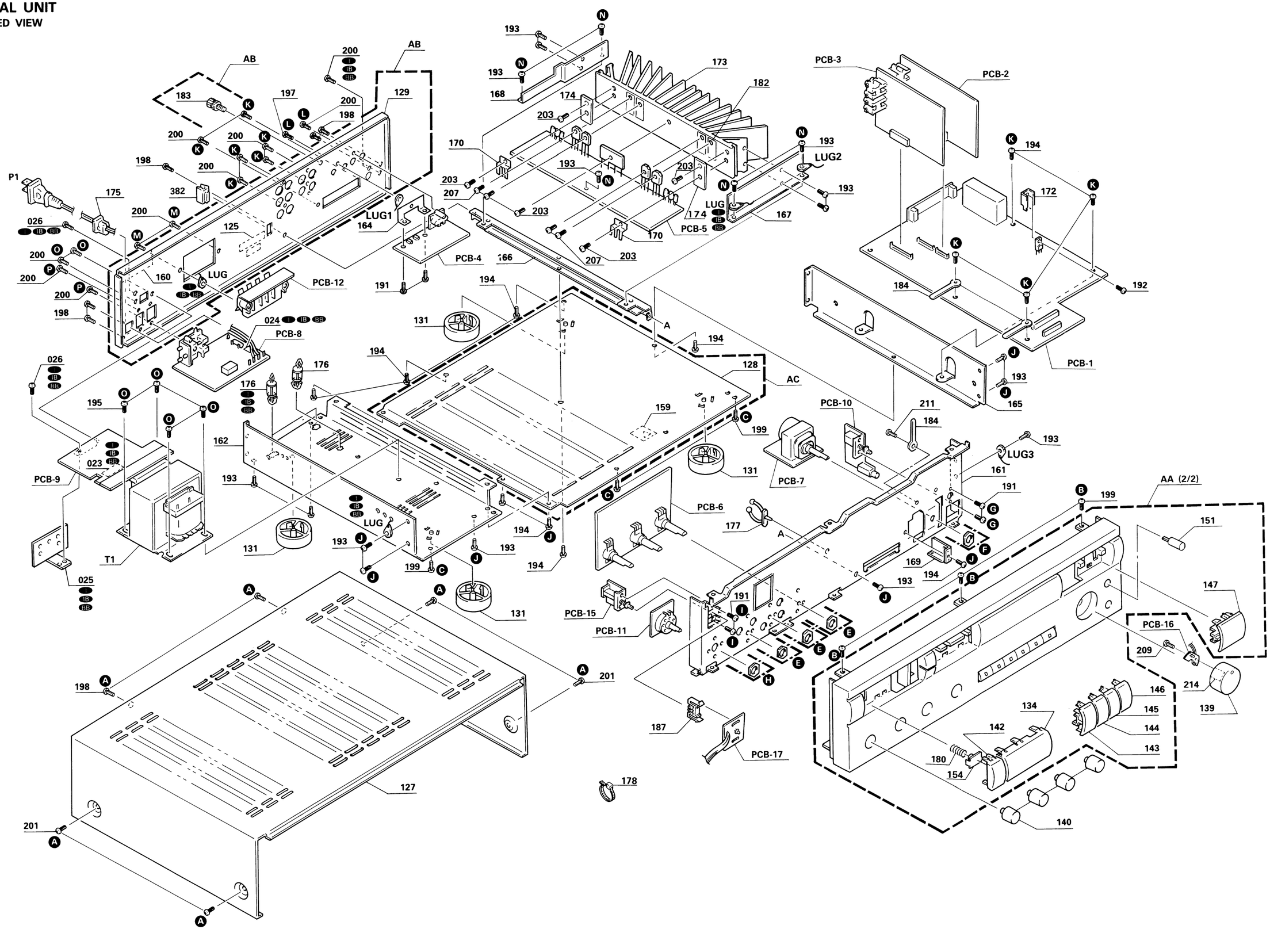
GENERAL UNIT PARTS LIST

Ref. No.	Part No.	Description
AB	A424-HK3400A	CABI BACK REAR ASS'Y (BK)
AB	A424-HK3400C	CABI BACK REAR ASS'Y (I) (IB) (BB)
AC	A424-HK3400B	CABI BACK BOTTOM ASS'Y (BK)
AC	A424-HK3400D	CABI BACK BOTTOM ASS'Y (I) (IB) (BB)
023	1756-01409	LABEL (I) (IB) (BB)
024	1756-01402	LABEL (I) (IB) (BB)
025	2219-8342	METAL FITTG (I) (IB) (BB)
026	2347-R0130064	SCREW, BND T + (3 x 6mm) (x 2)
125	1756-CSA	LABEL (BK)
127	1414-16201	CABINET TOP (BK)
127	1414-16203	CABINET TOP (I) (IB) (BB)
128	1424-33301	CABI BACK BOTTOM
129	1424-33102	CABI BACK REAR (BK)
129	1424-33104	CABI BACK REAR (I) (IB) (BB)
131	1319-03301	LEG (x 4)
134	1442-24702	PANEL (BK) (IB) (BB)
134	1442-24701	PANEL (I)
139	1630-04602	ROTARY KNOB, VOLUME (BK) (IB) (BB)
139	1630-04601	ROTARY KNOB, VOLUME (I)
140	1632-20702	ROTARY KNOB, SPEAKER, BASS, TREBLE, BALANCE (x 4) (BK) (IB) (BB)
140	1632-20701	ROTARY KNOB, SPEAKER, BASS, TREBLE, BALANCE (x 4) (I)
142	1662-62502	PUSH BUTTON, POWER (BK) (IB) (BB)
142	1662-62501	PUSH BUTTON, POWER (I)
143	1662-58605	PUSH BUTTON, PRESET 1/5 (BK) (IB) (BB)
143	1662-58601	PUSH BUTTON, PRESET 1/5 (I)
144	1662-58606	PUSH BUTTON, PRESET 2/6 (BK) (IB) (BB)
144	1662-58602	PUSH BUTTON, PRESET 2/6 (I)
145	1662-58607	PUSH BUTTON, PRESET 3/7 (BK) (IB) (BB)
145	1662-58603	PUSH BUTTON, PRESET 3/7 (I)
146	1662-58608	PUSH BUTTON, PRESET 4/8 (BK) (IB) (BB)
146	1662-58604	PUSH BUTTON, PRESET 4/8 (I)
147	1662-58902	PUSH BUTTON, TUNING (BK) (IB) (BB)
147	1662-58901	PUSH BUTTON, TUNING (I)
151	1662-62902	PUSH BUTTON, LOUDNESS (BK) (IB) (BB)
151	1662-62901	PUSH BUTTON, LOUDNESS (I)
154	1732-07901	INDICATOR
159	1751-01018	LABEL (BK)
160	1756-05910	LABEL (BK)
161	2211-7313	CHASSIS
162	2211-7314	CHASSIS
164	2219-8298	METAL FITTG
165	2219-8300	METAL FITTG
166	2219-8301	METAL FITTG
167	2219-8302	METAL FITTG
168	2219-8303	METAL FITTG
169	2219-8304	METAL FITTG
170	2219-8305	METAL FITTG (x 2)
172	2222-7230	HEAT SINK
173	2222-7283	HEAT SINK (BK)
173	2222-7284	HEAT SINK (I) (IB) (BB)
174	2222-7285	HEAT SINK (x 2)
175	2240-364	HOLDER
176	2240-7369	HOLDER
177	2240-7049	HOLDER
178	2240-R0101	HOLDER (x 18)
180	2651-2101736	SPRING
182	2224-7134	INSULATOR (x 4)
183	4214-168	TERMINAL
184	2218-R0130	BRACKET, FIX (x 3)
187	2240-7373	HOLDER
191	2327-R0130062	SCREW (3 x 6mm) (x 6)
192	2327-R0130082	SCREW (3 x 8mm)
193	2347-R0130062	SCREW (3 x 6mm) (x 17)
194	2347-R0130062	SCREW (3 x 6mm) (x 12)
195	2347-R0140082	SCREW (4 x 8mm) (x 4)
197	2327-R0130064	SCREW (3 x 6mm)
198	2347-R0130064	SCREW (3 x 6mm) (x 7)
199	2347-R0130084	SCREW (3 x 8mm) (x 6)
200	2347-R0130104	SCREW (3 x 10mm) (x 13)
201	2347-R0140064	SCREW (4 x 6mm) (x 4)
203	2347-R0130082	SCREW (3 x 8mm) (x 5)
207	2557-301029	SCREW (3 x 10mm) (x 4)
209	2347-R0126082	SCREW (2.6 x 8mm)
211	2347-R0130062	SCREW (3 x 6mm)
214	2134-11411	ADHESI SHEET
382	2240-7208	HOLDER
⚠P1	4161-71151	CORD W/PLUG (BK)
⚠P1	4161-7256	CORD W/PLUG (I) (IB)
⚠P1	4161-04100	CORD W/PLUG (BB)
⚠T1	5584-S9001	XFORMER, POWER (BK)
⚠T1	5584-S9002	XFORMER, POWER (I) (IB) (BB)

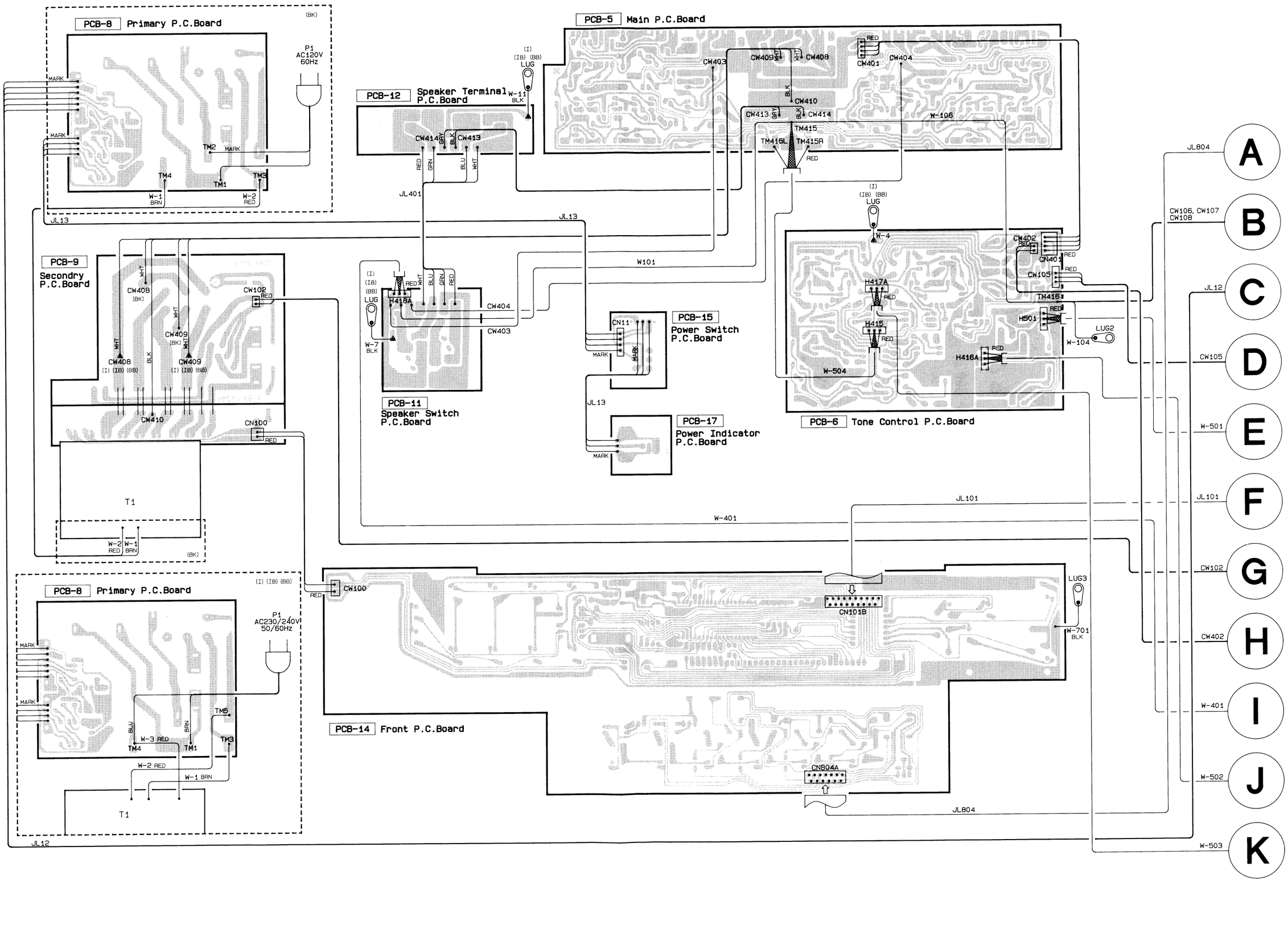
NOTE

⚠ SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

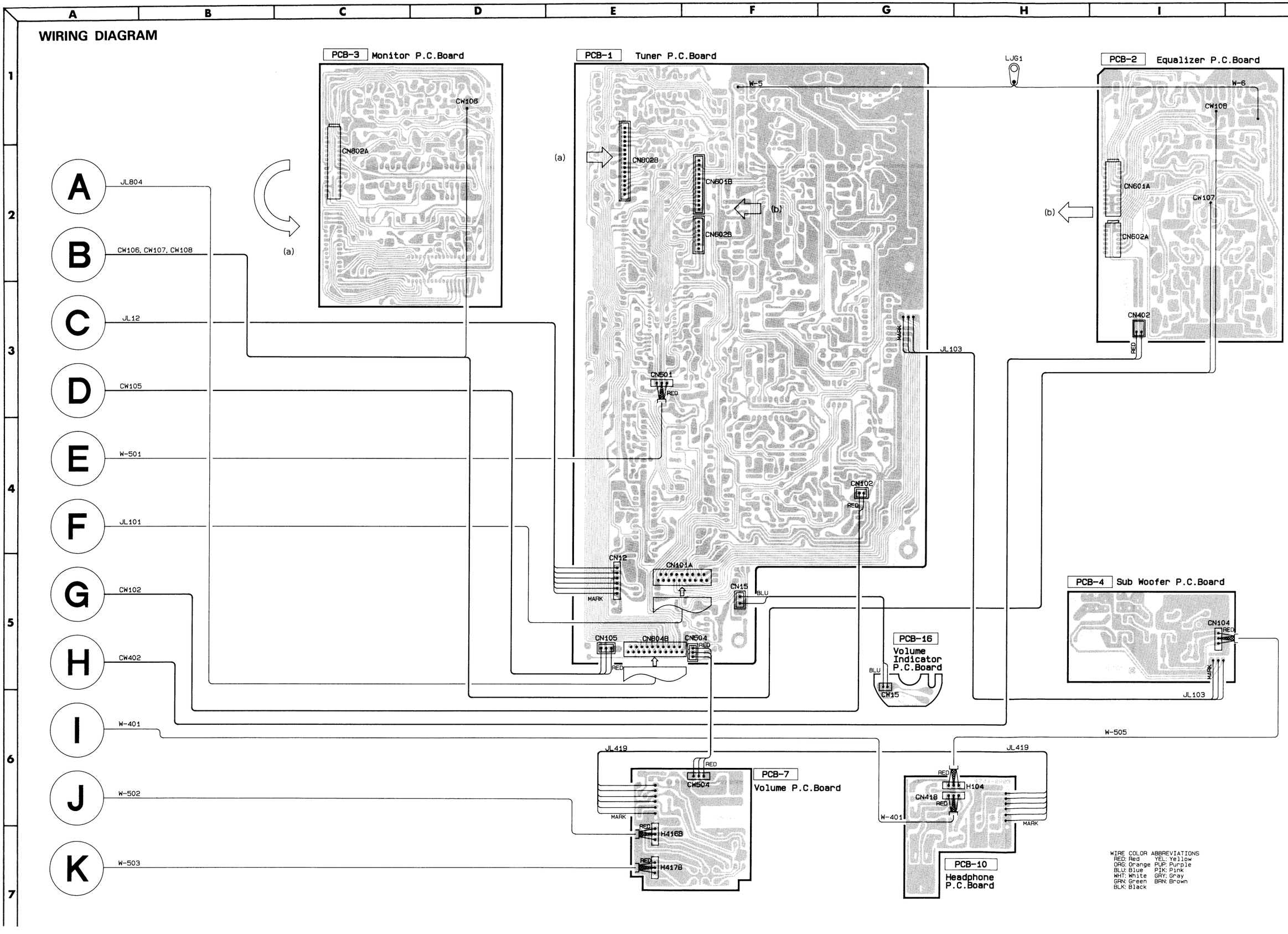
GENERAL UNIT
EXPLODED VIEW



WIRING DIAGRAM



WIRING DIAGRAM

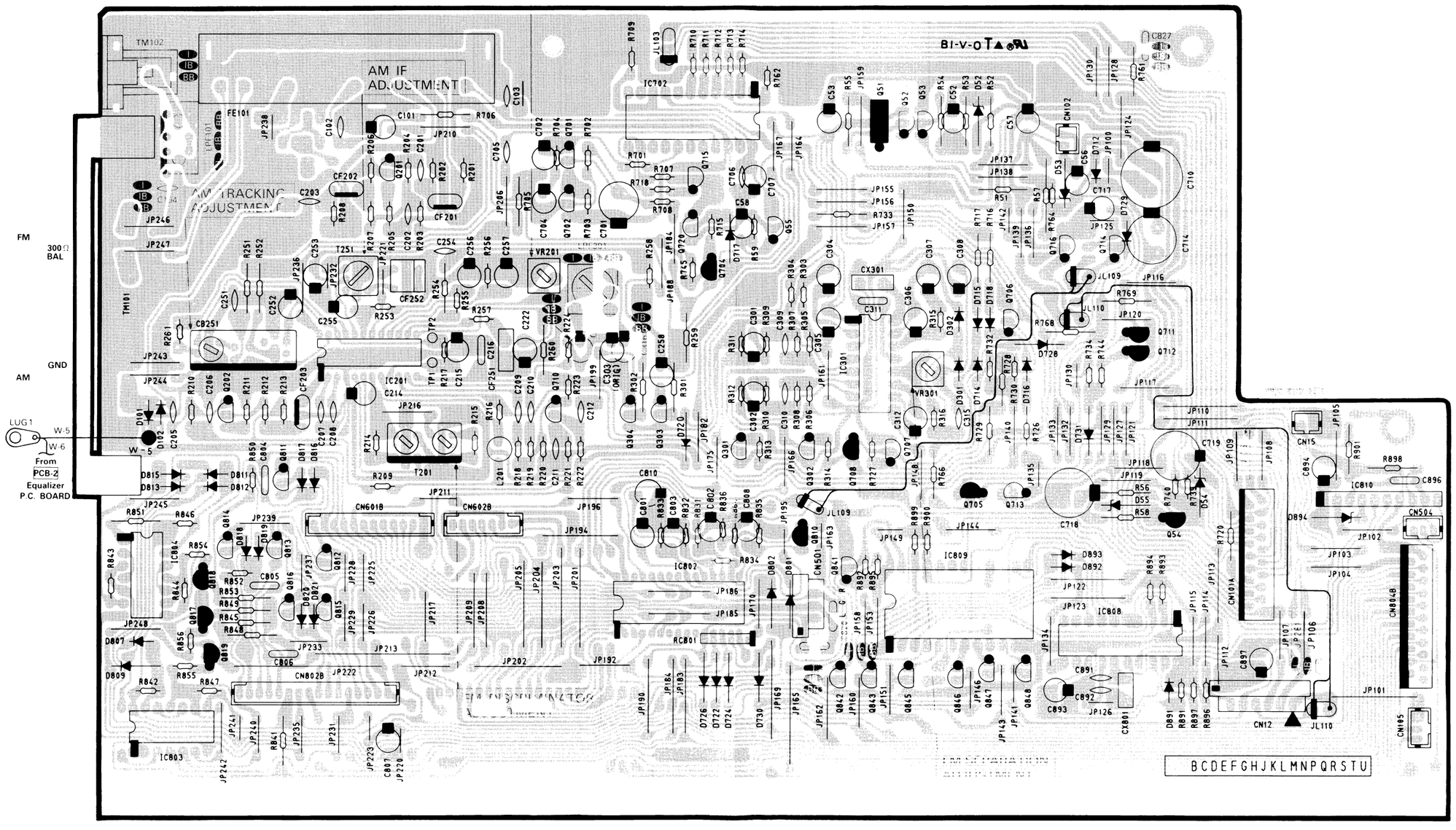


WIRE COLOR ABBREVIATIONS

RED: Red	YEL: Yellow
ORG: Orange	PUP: Purple
BLU: Blue	PIK: Pink
WHT: White	GAY: Gray
GRN: Green	BRN: Brown
BLK: Black	

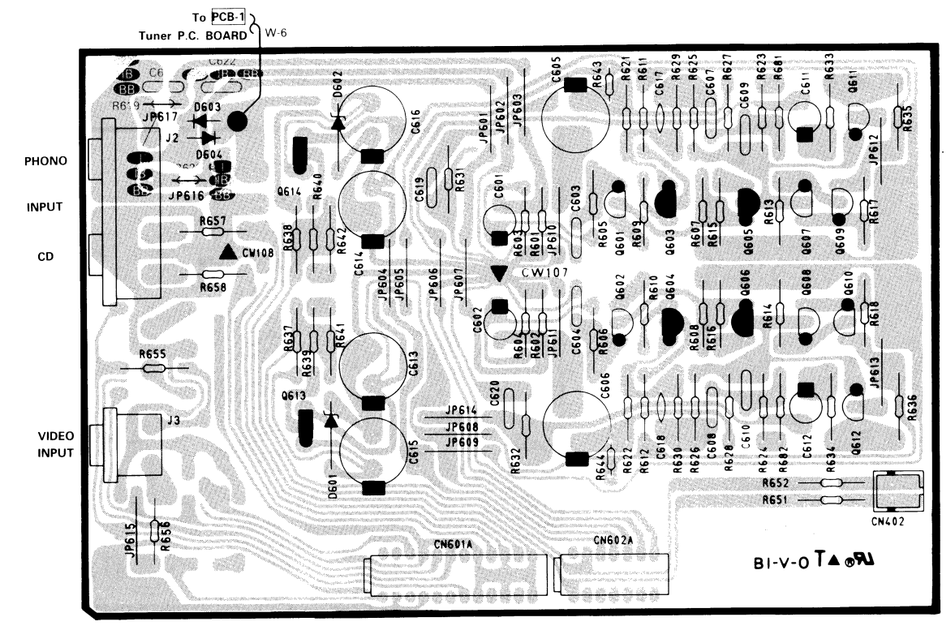
P.C. BOARDS

PCB-1 Tuner P.C. BOARD

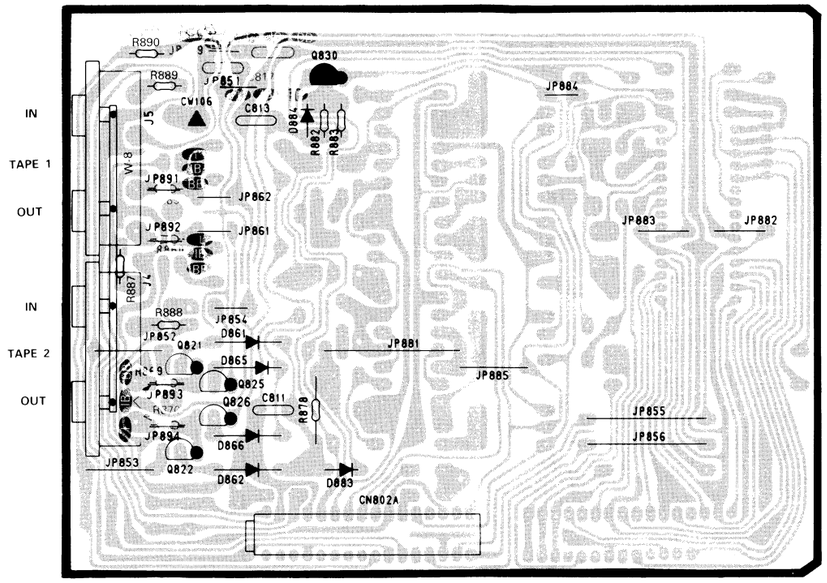


P.C. BOARDS

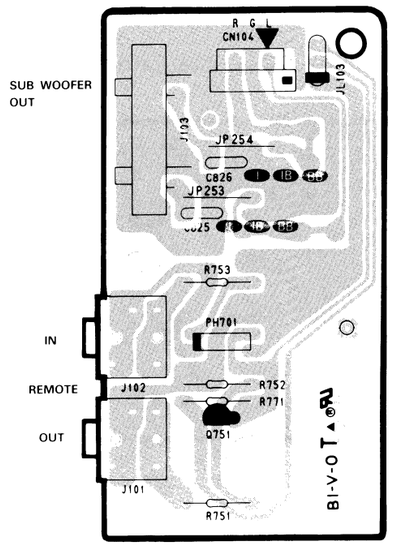
PCB-2 Equalizer P.C. BOARD



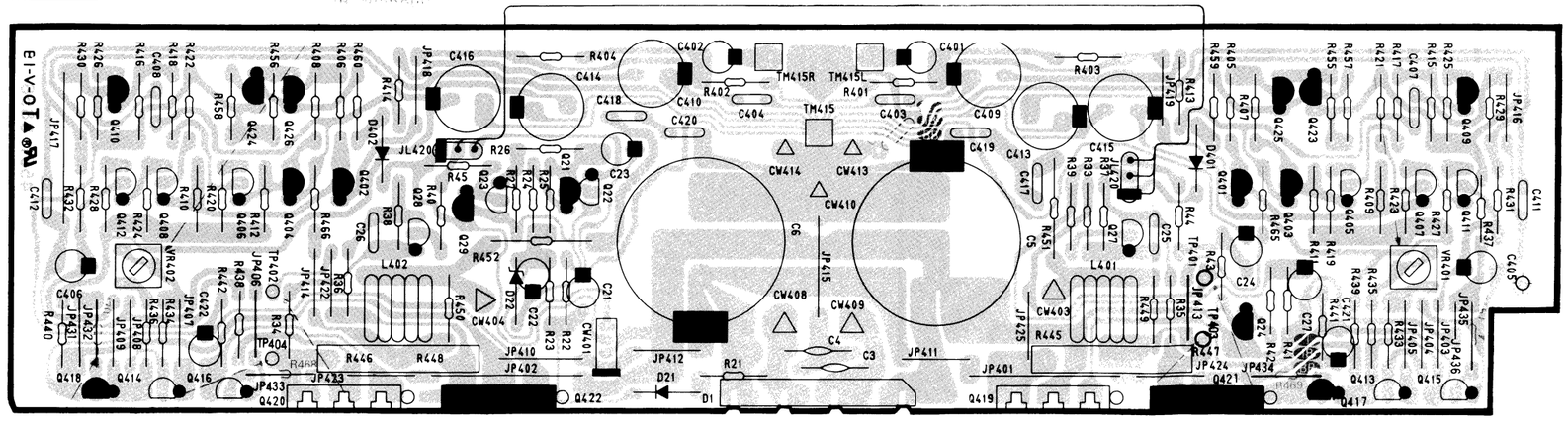
PCB-3 Monitor P.C. BOARD



PCB-4 Sub Woofer P.C. BOARD

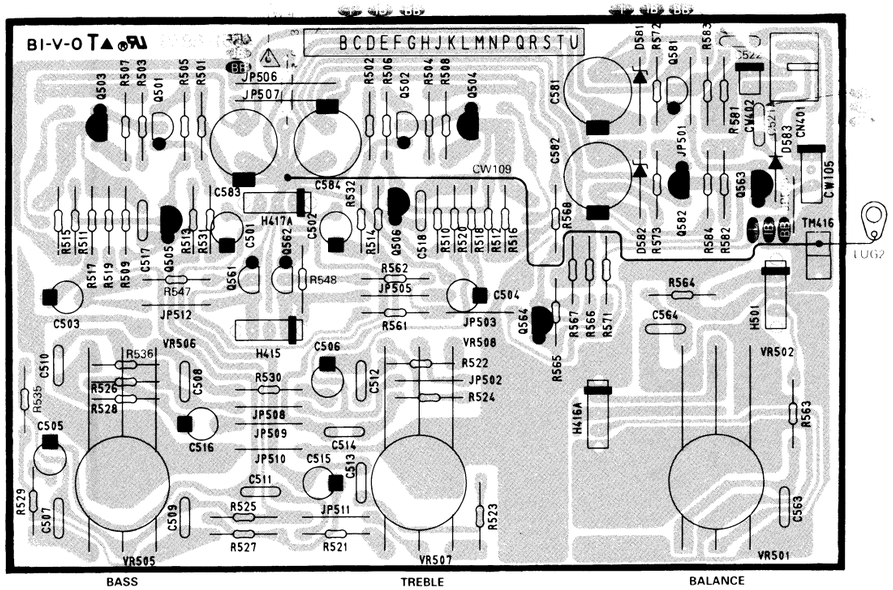


PCB-5 Main P.C. BOARD

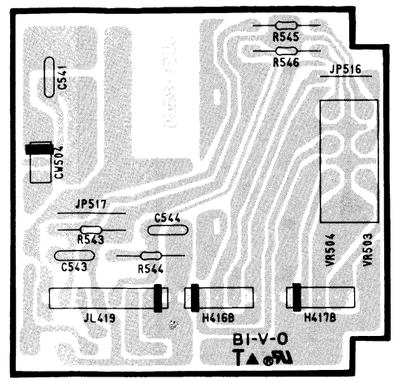


P.C. BOARDS

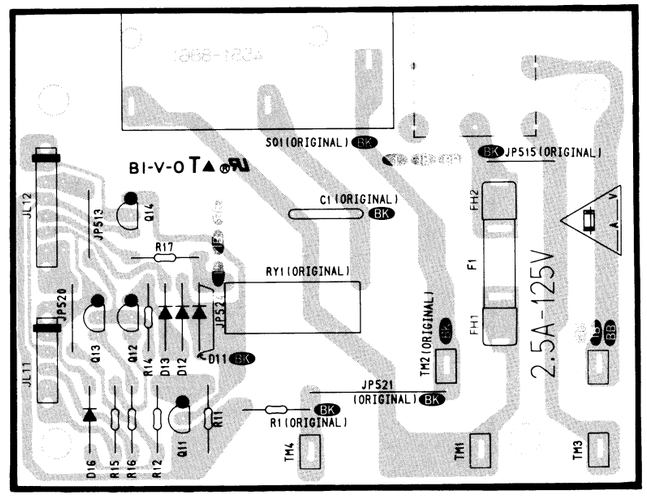
PCB-6 Tone Control P.C. BOARD



PCB-7 Volume P.C. BOARD

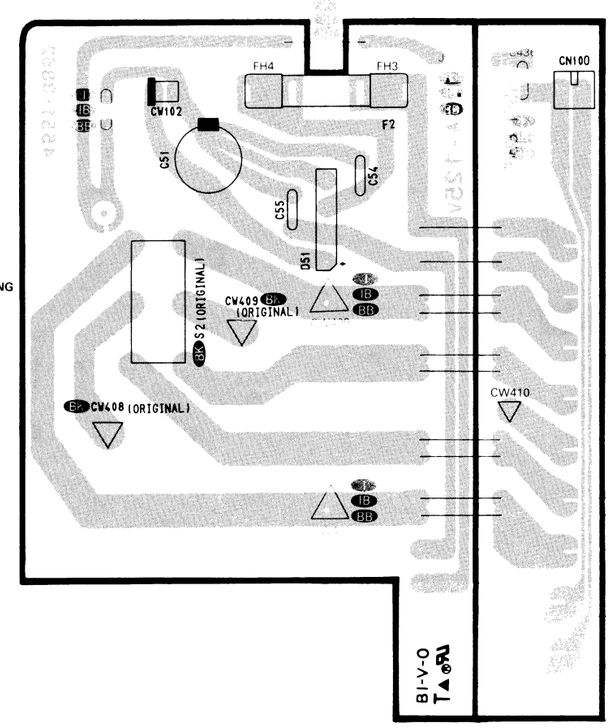


PCB-8 Primary P.C. BOARD

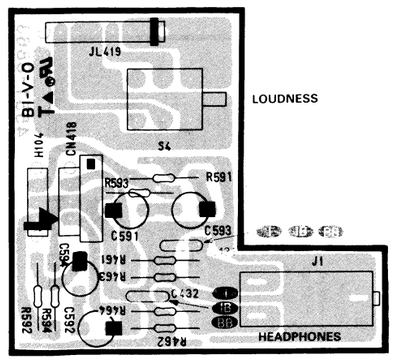


PCB-9 Secondry P.C. BOARD

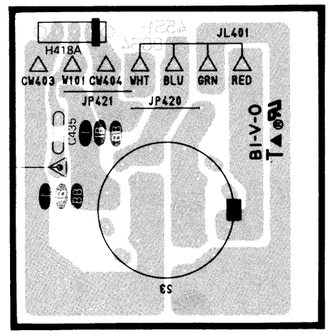
SPEAKER OPERATING MODE 4-8Ω



PCB-10 Headphone P.C. BOARD



PCB-11 Speaker Switch P.C. BOARD

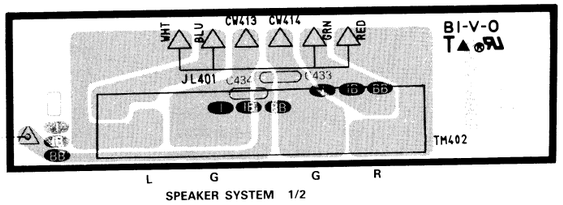


SPEAKER

OFF A B A+B

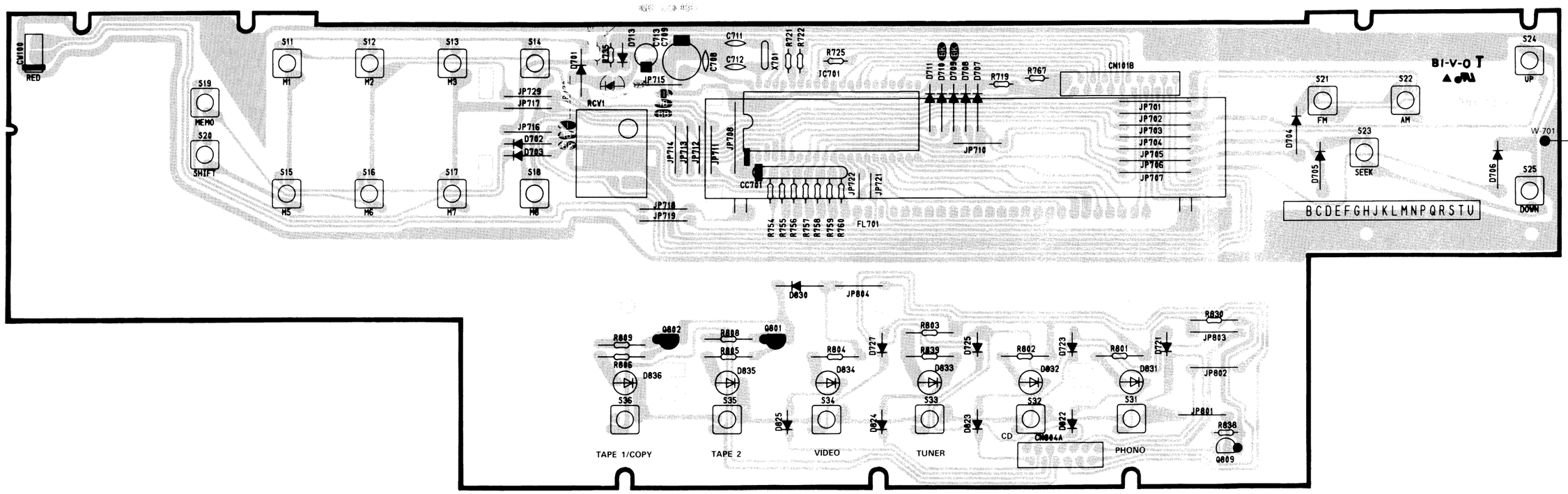
P.C. BOARDS

PCB-12 Speaker Terminal P.C. BOARD

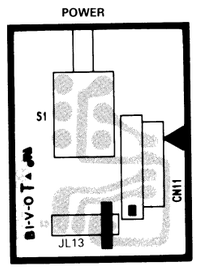


SPEAKER SYSTEM 1/2

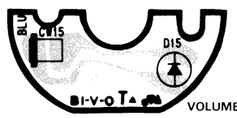
PCB-14 Front P.C. BOARD



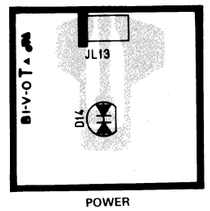
PCB-15 Power Switch P.C. BOARD



PCB-16 Volume Indicator P.C. BOARD



PCB-17 Power Indicator P.C. BOARD



ELECTRICAL PARTS LIST

PCB-1 TUNER P.C. BOARD

CAPACITORS

Ser. No.	Ref. No.	Part No.	Description
515	C52	5345-107C041	CAP, MINI ELE 100 μ/16V
512	C53	5345-476D041	CAP, MINI ELE 47 μ/25V
513	C56	5345-107B041	CAP, MINI ELE 100 μ/10V
512	C57	5345-476D041	CAP, MINI ELE 47 μ/25V
512	C58	5345-476D041	CAP, MINI ELE 47 μ/25V
325	C101	5345-476D041	CAP, MINI ELE 47 μ/25V
327	C102	5361-223Z921	CAP, CER .022 μ
329	C103	5361-150J917	CAP, CER 15p
053B	C104	5361-220JCH	CAP, CER 22p (I) (IB) (BB)
361	C201	5361-223Z921	CAP, CER .022 μ
361	C202	5361-223Z921	CAP, CER .022 μ
362	C203	5361-223ZF	CAP, CER .022 μ
361	C205	5361-223Z921	CAP, CER .022 μ
361	C206	5361-223Z921	CAP, CER .022 μ
361	C207	5361-223Z921	CAP, CER .022 μ
361	C208	5361-223Z921	CAP, CER .022 μ
361	C209	5361-223Z921	CAP, CER .022 μ
361	C210	5361-223Z921	CAP, CER .022 μ
361	C211	5361-223Z921	CAP, CER .022 μ
361	C212	5361-223Z921	CAP, CER .022 μ
364	C214	5345-106F041	CAP, MINI ELE 10 μ/50V
365	C215	5345-105F041	CAP, MINI ELE 1 μ/50V
363	C216	5359-1015851	CAP, PPP 100p
393	C222	5345-224F041	CAP, MINI ELE .22 μ/50V
389	C251	5361-473ZF	CAP, CER .047 μ
391	C252	5345-106F041	CAP, MINI ELE 10 μ/50V
391	C253	5345-106F041	CAP, MINI ELE 10 μ/50V
390	C254	5361-472M919	CAP, CER 4700p
392	C255	5345-475F041	CAP, MINI ELE 4.7 μ/50V
392	C256	5345-475F041	CAP, MINI ELE 4.7 μ/50V
365	C257	5345-105F041	CAP, MINI ELE 1 μ/50V
393	C258	5345-224F041	CAP, MINI ELE .22 μ/50V
419	C301	5345-225F041	CAP, MINI ELE 2.2 μ/50V
419	C302	5345-225F041	CAP, MINI ELE 2.2 μ/50V
420	C303	5345-226D041	CAP, MINI ELE 22 μ/25V
420	C304	5345-226D041	CAP, MINI ELE 22 μ/25V
421	C305	5345-476D041	CAP, MINI ELE 47 μ/25V
422	C306	5345-224F0951	CAP, MINI ELE .22 μ/50V
423	C307	5345-474F0951	CAP, MINI ELE .47 μ/50V
424	C308	5345-106F041	CAP, MINI ELE 10 μ/50V
417	C309	5359-4715851	CAP, PPP 470p (BK)
417B	C309	5359-2715851	CAP, PPP 270p (I) (IB) (BB)
417	C310	5359-4715851	CAP, PPP 470p (BK)
417B	C310	5359-2715851	CAP, PPP 270p (I) (IB) (BB)
418	C311	5354-473K1HM	CAP, MYL .047 μ
419	C312	5345-225F041	CAP, MINI ELE 2.2 μ/50V
425	C315	5361-101K918	CAP, CER 100p
055B	C316	5345-226D041	CAP, MINI ELE 22 μ/25V (I) (IB) (BB)
453	C701	5345-227C041	CAP, MINI ELE 220 μ/16V
459	C702	5345-224F0951	CAP, MINI ELE .22 μ/50V
454	C704	5345-684F0951	CAP, MINI ELE .68 μ/50V
460	C705	5361-223Z921	CAP, CER .022 μ
461	C706	5361-102K918	CAP, CER 1000p
455	C707	5345-476D041	CAP, MINI ELE 47 μ/25V
458	C710	5345-228A041	CAP, MINI ELE 2200 μ/6.3V
456	C714	5345-108A041	CAP, MINI ELE 1000 μ/6.3V
494	C717	5345-105F041	CAP, MINI ELE 1 μ/50V
495	C718	5345-227D041	CAP, MINI ELE 220 μ/25V
496	C719	5345-106F041	CAP, MINI ELE 10 μ/50V
809	C801	5345-106F041	CAP, MINI ELE 10 μ/50V
809	C802	5345-106F041	CAP, MINI ELE 10 μ/50V
810	C803	5345-104F041	CAP, MINI ELE .1 μ/50V
808	C804	5354-104593	CAP, MYL .1 μ
808	C805	5354-104593	CAP, MYL .1 μ
808	C806	5354-104593	CAP, MYL .1 μ
809	C807	5345-106F041	CAP, MINI ELE 10 μ/50V
809	C808	5345-106F041	CAP, MINI ELE 10 μ/50V
823	C810	5345-474F041	CAP, MINI ELE .47 μ/50V
050B	C819	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
050B	C820	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
057B	C827	5354-103K1HM	CAP, MYL .01 μ (I) (IB) (BB)
869	C891	5361-101KB	CAP, CER 100p
869	C892	5361-101KB	CAP, CER 100p
870	C893	5345-104F041	CAP, MINI ELE .1 μ/50V
871	C894	5345-106F041	CAP, MINI ELE 10 μ/50V
880	C896	5354-103K1HM	CAP, MYL .01 μ
919	C897	5345-477B041	CAP, MINI ELE 470 μ/10V

RESISTORS

Ser. No.	Ref. No.	Part No.	Description
524	⚠R51	5102-2R25116	RES, FUSE 2.2
517	R52	5135-272522	RES, CBN 1/2P 2.7K
518	R53	5135-101522	RES, CBN 1/2P 100
518	R54	5135-101522	RES, CBN 1/2P 100
519	R55	5135-331522	RES, CBN 1/2P 330
520	⚠R56	5102-3915116	RES, FUSE 390
523	R57	5171-221593	RES, MTL 1P 220
521	R58	5135-272522	RES, CBN 1/2P 2.7K
522	R59	5232-102J16P	RES, CBN 1/6P 1K
369	R201	5232-331J16P	RES, CBN 1/6P 330
370	R202	5232-391J16P	RES, CBN 1/6P 390
374	R203	5232-102J16P	RES, CBN 1/6P 1K
371	R204	5232-154J16P	RES, CBN 1/6P 150K
372	R205	5232-100J16P	RES, CBN 1/6P 10
373	R206	5232-101J16P	RES, CBN 1/6P 100
370	R207	5232-391J16P	RES, CBN 1/6P 390
370	R208	5232-391J16P	RES, CBN 1/6P 390
374	R209	5232-102J16P	RES, CBN 1/6P 1K
371	R210	5232-154J16P	RES, CBN 1/6P 150K
372	R211	5232-100J16P	RES, CBN 1/6P 10
373	R212	5232-101J16P	RES, CBN 1/6P 100
370	R213	5232-391J16P	RES, CBN 1/6P 390
375	R214	5232-103J16P	RES, CBN 1/6P 10K
376	R215	5232-332J16P	RES, CBN 1/6P 3.3K
377	R216	5232-472J16P	RES, CBN 1/6P 4.7K
378	R217	5232-153J16P	RES, CBN 1/6P 15K (BK)
378B	R217	5232-273J16P	RES, CBN 1/6P 27K (I) (IB) (BB)
377	R218	5232-472J16P	RES, CBN 1/6P 4.7K
368	R219	5232-104J16P	RES, CBN 1/6P 100K
366	R220	5232-154J16P	RES, CBN 1/6P 150K
374	R221	5232-102J16P	RES, CBN 1/6P 1K
377	R222	5232-472J16P	RES, CBN 1/6P 4.7K
367	R223	5232-104J16P	RES, CBN 1/6P 100K
377	R224	5232-472J16P	RES, CBN 1/6P 4.7K (BK)
054B	R224	5232-222J16P	RES, CBN 1/6P 2.2K (I) (IB) (BB)
397	R251	5135-334522	RES, CBN 1/2P 330K
398	R252	5135-104522	RES, CBN 1/2P 100K
401	R253	5232-103J16P	RES, CBN 1/6P 10K
399	R254	5135-102522	RES, CBN 1/2P 1K
401	R255	5232-103J16P	RES, CBN 1/6P 10K
402	R256	5232-223J16P	RES, CBN 1/6P 22K
403	R257	5232-820J16P	RES, CBN 1/6P 82
405	R258	5232-183J16P	RES, CBN 1/6P 18K (BK)
405B	R258	5232-223J16P	RES, CBN 1/6P 22K (I) (IB) (BB)
404	R259	5135-152522	RES, CBN 1/2P 1.5K
406	R260	5135-103522	RES, CBN 1/2P 10K
407	R261	5232-471J16P	RES, CBN 1/6P 470
435	R301	5135-105522	RES, CBN 1/2P 1M
435	R302	5135-105522	RES, CBN 1/2P 1M
427	R303	5232-104J16P	RES, CBN 1/6P 100K (BK)
427B	R303	5232-274J16P	RES, CBN 1/6P 270K (I) (IB) (BB)
427	R304	5232-104J16P	RES, CBN 1/6P 100K (BK)
427B	R304	5232-274J16P	RES, CBN 1/6P 270K (I) (IB) (BB)
428	R305	5232-104J16P	RES, CBN 1/6P 100K
428	R306	5232-104J16P	RES, CBN 1/6P 100K
429	R307	5232-164J16P	RES, CBN 1/6P 160K (BK)
429B	R307	5232-184J16P	RES, CBN 1/6P 180K (I) (IB) (BB)
429	R308	5232-164J16P	RES, CBN 1/6P 160K (BK)
429B	R308	5232-184J16P	RES, CBN 1/6P 180K (I) (IB) (BB)
430	R309	5232-182J16P	RES, CBN 1/6P 1.8K
430	R310	5232-182J16P	RES, CBN 1/6P 1.8K
431	R311	5232-103J16P	RES, CBN 1/6P 10K
431	R312	5232-103J16P	RES, CBN 1/6P 10K
431	R313	5232-103J16P	RES, CBN 1/6P 10K
431	R314	5232-103J16P	RES, CBN 1/6P 10K
432	R315	5232-472J16P	RES, CBN 1/6P 4.7K
431	R316	5232-103J16P	RES, CBN 1/6P 10K
465	R701	5232-103J16P	RES, CBN 1/6P 10K
465	R702	5232-103J16P	RES, CBN 1/6P 10K
466	R703	5232-473J16P	RES, CBN 1/6P 47K
467	R704	5232-222J16P	RES, CBN 1/6P 2.2K
471	R705	5135-102522	RES, CBN 1/2P 1K
471	R706	5135-102522	RES, CBN 1/2P 1K
465	R707	5232-103J16P	RES, CBN 1/6P 10K
468	R708	5232-102J16P	RES, CBN 1/6P 1K
470	R709	5232-104J16P	RES, CBN 1/6P 100K
467	R710	5232-222J16P	RES, CBN 1/6P 2.2K
467	R711	5232-222J16P	RES, CBN 1/6P 2.2K
467	R712	5232-222J16P	RES, CBN 1/6P 2.2K
467	R713	5232-222J16P	RES, CBN 1/6P 2.2K
469	R714	5232-472J16P	RES, CBN 1/6P 4.7K
472	R715	5232-273J16P	RES, CBN 1/6P 27K
473	R716	5135-103522	RES, CBN 1/2P 10K
473	R717	5135-103522	RES, CBN 1/2P 10K
465	R718	5232-103J16P	RES, CBN 1/6P 10K
471	R720	5135-102522	RES, CBN 1/2P 1K
473	R726	5135-103522	RES, CBN 1/2P 10K
477	R727	5232-473J16P	RES, CBN 1/6P 47K
476	R728	5135-223522	RES, CBN 1/2P 22K
473	R729	5135-103522	RES, CBN 1/2P 10K
464	R730	5232-223J16P	RES, CBN 1/6P 22K
465	R732	5232-103J16P	RES, CBN 1/6P 10K
478	R733	5135-104522	RES, CBN 1/2P 100K
465	R734	5232-103J16P	RES, CBN 1/6P 10K
470	R739	5232-104J16P	RES, CBN 1/6P 100K
470	R740	5232-104J16P	RES, CBN 1/6P 100K
470	R744	5232-104J16P	RES, CBN 1/6P 100K
472	R745	5232-273J16P	RES, CBN 1/6P 27K
483	R761	5135-101522	RES, CBN 1/2P 100
484	R762	5232-332J16P	RES, CBN 1/6P 3.3K
465	R764	5232-103J16P	RES, CBN 1/6P 10K
482	R766	5135-332522	RES, CBN 1/2P 3.3K
474	R768	5135-472522	RES, CBN 1/2P 4.7K
482	R769	5135-332522	RES, CBN 1/2P 3.3K
819	R831	5232-224J16P	RES, CBN 1/6P 220K
815	R832	5232-104J16P	RES, CBN 1/6P 100K
821	R833	5232-274J16P	RES, CBN 1/6P 270K
819	R834	5232-224J16P	RES, CBN 1/6P 220K
818	R835	5232-223J16P	RES, CBN 1/6P 22K
818	R836	5232-223J16P	RES, CBN 1/6P 22K
820	R841	5135-472522	RES, CBN 1/2P 4.7K
815	R842	5232-104J16P	RES, CBN 1/6P 100K
817	R843	5232-473J16P	RES, CBN 1/6P 47K
817	R844	5232-473J16P	RES, CBN 1/6P 47K
812	R845	5135-104522	RES, CBN 1/2P 100K
815	R846	5232-104J16P	RES, CBN 1/6P 100K
817	R847	5232-473J16P	RES, CBN 1/6P 47K
813	R848	5135-105522	RES, CBN 1/2P 1M
812	R849	5135-104522	RES, CBN 1/2P 100K
816	R850	5232-105J16P	RES, CBN 1/6P 1M
812	R851	5135-104522	RES, CBN 1/2P 100K
816	R852	5232-105J16P	RES, CBN 1/6P 1M
814	R853	5135-104522	RES, CBN 1/2P 100K
819	R854	5232-224J16P	RES, CBN 1/6P 220K
819	R855	5232-224J16P	RES, CBN 1/6P 220K
819	R856	5232-224J16P	RES, CBN 1/6P 220K
811	R866	5232-100J16P	RES, CBN 1/6P 10
872	R891	5232-104J16P	RES, CBN 1/6P 100K
873	R892	5232-473J16P	RES, CBN 1/6P 47K
873	R893	5232-473J16P	RES, CBN 1/6P 47K
873	R894	5232-473J16P	RES, CBN 1/6P 47K
873	R895	5232-473J16P	RES, CBN 1/6P 47K
879	R896	5232-472J16P	RES, CBN 1/6P 4.7K
879	R897	5232-472J16P	RES, CBN 1/6P 4.7K
874	⚠R898	5102-2205116	RES, FUSE 22
873	R899	5232-473J16P	RES, CBN 1/6P 47K
873	R900	5232-473J16P	RES, CBN 1/6P 47K
882	R901	5135-821522	RES, CBN 1/2P 820

INTEGRATED CIRCUITS

Ser. No.	Ref. No.	Part No.	Description
351	IC201	5653-LA1266	IC, LINEAR
411	IC301	5653-LA3410	IC, LINEAR
442	IC702	5654-TC9227P	IC, DIGITAL
801	IC802	5654-LC7818	IC, DIGITAL
802	IC803	5654-TC4011BP	IC, DIGITAL
802	IC804	5654-TC4011BP	IC, DIGITAL
861	IC808	5654-M761281P	IC, DIGITAL
862	IC809	5654-TC4514BP	IC, DIGITAL
875	IC810	5653-LB1641	IC, LINEAR

TRANSISTORS

Ser. No.	Ref. No.	Part No.	Description
501	Q51	5612-1375	XISTOR, PNP A
502	Q52	5613-3311A(R)	XISTOR, NPN R
503	Q53	5613-UN4212	XISTOR, NPN R
504	Q54	5612-647(C)	XISTOR, PNP A
502	Q55	5613-3311A(R)	XISTOR, NPN R
352	Q201	5613-2058(N)	XISTOR, NPN R
352	Q202	5613-2058(N)	XISTOR, NPN R
412	Q301	5614-1450(T)	XISTOR, NPN A
412	Q302	5614-1450(T)	XISTOR, NPN A
413	Q303	5616-2SK364BL	FET, N-CH
413	Q304	5616-2SK364BL	FET, N-CH
443	Q701	5613-2240(BL)	XISTOR, NPN R
444	Q702	5613-3311A(R)	XISTOR, NPN R
446	Q704	5611-UN4112	XISTOR, PNP R
446	Q705	5611-UN4112	XISTOR, PNP R
445	Q706	5613-UN4212	XISTOR, NPN R
444	Q707	5613-3311A(R)	XISTOR, NPN R
446	Q708	5611-UN4112	XISTOR, PNP R
444	Q710	5613-3311A(R)	XISTOR, NPN R
446	Q711	5611-UN4112	XISTOR, PNP R
448	Q712	5611-1309A(R)	XISTOR, PNP R
445	Q713	5613-UN4212	XISTOR, NPN R
498	Q714	5613-UN4213	XISTOR, NPN R
445	Q715	5613-UN4212	XISTOR, NPN R
445	Q716	5613-UN4212	XISTOR, NPN R
445	Q720	5613-UN4212	XISTOR, NPN R
822	Q810	5611-1309A(R)	XISTOR, PNP R
803	Q811	5616-2SK364BL	FET, N-CH
803	Q812	5616-2SK364BL	FET, N-CH
803	Q813	5616-2SK364BL	FET, N-CH
803	Q814	5616-2SK364BL	FET, N-CH
803	Q815	5616-2SK364BL	FET, N-CH
803	Q816	5616-2SK364BL	FET, N-CH
804	Q817	5611-UN4112	XISTOR, PNP R
804	Q818	5611-UN4112	XISTOR, PNP R
804	Q819	5611-UN4112	XISTOR, PNP R
863	Q841	5613-3311A(R)	XISTOR, NPN R
864	Q842	5613-UN4212	XISTOR, NPN R
864	Q843	5613-UN4212	XISTOR, NPN R
864	Q845	5613-UN4212	XISTOR, NPN R
864	Q846	5613-UN4212	XISTOR, NPN R
864	Q847	5613-UN4212	XISTOR, NPN R
864	Q848	5613-UN4212	XISTOR, NPN R

DIODES

Ser. No.	Ref. No.	Part No.	Description
506	D52	5635-HZ12C2L	DIODE, ZENER
507	D53	5635-HZ6B1L	DIODE, ZENER
508	D54	5635-HZ5B2	DIODE, ZENER
509	D55	5635-HZ24-1L	DIODE, ZENER
416	D101	5631-1SS133	DIODE, DET
416	D102	5631-1SS133	DIODE, DET
416	D301	5631-1SS133	DIODE, DET
416	D302	5631-1SS133	DIODE, DET
450	D712	5631-1SS133	DIODE, DET
450	D714	5631-1SS133	DIODE, DET
450	D715	5631-1SS133	DIODE, DET
450	D716	5631-1SS133	DIODE, DET
452	D717	5631-1S2473	DIODE, DET
450	D718	5631-1SS133	DIODE, DET
452	D720	5631-1S2473	DIODE, DET
856	D722	5631-1S2473	DIODE, DET
856	D724	5631-1S2473	DIODE, DET
856	D726	5631-1S2473	DIODE, DET
805	D728	5631-1S2473	DIODE, DET
450	D729	5631-1SS133	DIODE, DET
856	D730	5631-1S2473	DIODE, DET
452	D731	5631-1S2473	DIODE, DET
805	D801	5631-1S2473	DIODE, DET
805	D802	5631-1S2473	DIODE, DET
806	D807	5631-1SS133	DIODE, DET
805	D809	5631-1S2473	DIODE, DET
806	D811	5631-1SS133	DIODE, DET
806	D812	5631-1SS133	DIODE, DET
806	D813	5631-1SS133	DIODE, DET
806	D815	5631-1SS133	DIODE, DET

Ser. No.	Ref. No.	Part No.	Description
806	D816	5631-1SS133	DIODE, DET
806	D817	5631-1SS133	DIODE, DET
806	D818	5631-1SS133	DIODE, DET
806	D819	5631-1SS133	DIODE, DET
806	D820	5631-1SS133	DIODE, DET
806	D821	5631-1SS133	DIODE, DET
866	D891	5631-1SS133	DIODE, DET
866	D892	5631-1SS133	DIODE, DET
866	D893	5631-1SS133	DIODE, DET
878	D894	5635-HZ3C2	DIODE, ZENER
		COIL	
358	L201	5995-2R2J69	COIL W/CORE
		TRANSFORMERS	
357	T201	5572-10201	DISCRI 7
384	T251	5552-00712	IFT, AM 7
		CONTROLS	
354	VR201	5101-50301934	RES, SEMI FIX 50K
415	VR301	5101-10401934	RES, SEMI FIX 100K
		MISCELLANEOUS	
383	CB251	6111-02401	RF BLOCK
355	CF201	5671-7120A	FILTER, CER S BK
355B	CF201	5671-7141A	FILTER, CER S I IB BB
355	CF202	5671-7120A	FILTER, CER S BK
356B	CF202	5671-7142A	FILTER, CER S I IB BB
356	CF203	5671-012A	FILTER, CER S BK
356B	CF203	5671-7142A	FILTER, CER S I IB BB
386	CF251	5671-7137C	FILTER, CER S
385	CF252	5671-0159	FILTER, CER S
941	CN12	4443-060185	CONNECTOR
949	CN15	4443-0201140	CONNECTOR
539	CN101A	4443-05501019	CONNECTOR
939	CN102	4443-0201140	CONNECTOR
946	CN105	4443-0301140	CONNECTOR
940	CN501	4443-030185	CONNECTOR
937	CN504	4443-0301140	CONNECTOR
825	CN601B	4443-01801012	CONNECTOR
826	CN602B	4443-01801007	CONNECTOR
827	CN802B	4443-01801016	CONNECTOR
867	CN804B	4443-05501013	CONNECTOR
935	CW106	4163-0150039	CONNECTOR W/W
936	CW107	4163-0145039	CONNECTOR W/W
936	CW108	4163-0145039	CONNECTOR W/W
414	CX301	5693-CSB456F1	OSC, CER
865	CX801	5693-CSB400P	OSC, CER
321	⚠FE101	6114-00701	FM TUNER BK
321B	⚠FE101	6114-00601	FM TUNER I IB BB
959	JL103	4242-R0103181	JUMPER LEAD
545	JL109	4132-R0100101	CORD, 2C
546	JL110	4132-R0100121	CORD, 2C
052B	LPF101	5214-78	LC COMPOSITE I IB BB
056B	LPF301	5214-86	LC COMPOSITE I IB BB
330	LUG1	4211-4	LUG
829	RC801	5212-223J0503	R COMPOSITE
547	⚠TM101	4214-164	TERMINAL
051B	⚠TM102	4214-167	TERMINAL I IB BB
541	TP1	4214-132	TERMINAL
541	TP2	4214-132	TERMINAL

PCB-2 EQUALIZER P.C. BOARD

		CAPACITORS	
576	C601	5345-106C0951	CAP, MINI ELE 10μ/16V
576	C602	5345-106C0951	CAP, MINI ELE 10μ/16V
582	C603	5359-1215851	CAP, PPP 120p
582	C604	5359-1215851	CAP, PPP 120p
575	C605	5345-227A0951	CAP, MINI ELE 220μ/6.3V
575	C606	5345-227A0951	CAP, MINI ELE 220μ/6.3V
583	C607	5359-5625851	CAP, PPP 5600p
583	C608	5359-5625851	CAP, PPP 5600p
584	C609	5359-2025851	CAP, PPP 2000p
584	C610	5359-2025851	CAP, PPP 2000p
576	C611	5345-106C0951	CAP, MINI ELE 10μ/16V
576	C612	5345-106C0951	CAP, MINI ELE 10μ/16V
577	C613	5345-227D041	CAP, MINI ELE 220μ/25V
577	C614	5345-227D041	CAP, MINI ELE 220μ/25V
578	C615	5345-107D041	CAP, MINI ELE 100μ/25V
578	C616	5345-107D041	CAP, MINI ELE 100μ/25V
588	C617	5353-040934	CAP, MCA 4p BK
588B	C617	5353-100934	CAP, MCA 10p I IB BB
588	C618	5353-040934	CAP, MCA 4p BK
588B	C618	5353-100934	CAP, MCA 10p I IB BB
585	C619	5359-1825851	CAP, PPP 1800p BK
585B	C619	5359-1225851	CAP, PPP 1200p I IB BB
585	C620	5359-1825851	CAP, PPP 1800p BK
585B	C620	5359-1225851	CAP, PPP 1200p I IB BB
060B	C621	5359-2215851	CAP, PPP 220p I IB BB
060B	C622	5359-2215851	CAP, PPP 220p I IB BB
		RESISTORS	
591	R601	5135-823522	RES, CBN 1/2P 82K
591	R602	5135-823522	RES, CBN 1/2P 82K
592	R603	5135-124522	RES, CBN 1/2P 120K
592	R604	5135-124522	RES, CBN 1/2P 120K
593	R605	5135-221522	RES, CBN 1/2P 220 BK
593B	R605	5135-102522	RES, CBN 1/2P 1K I IB BB
593	R606	5135-221522	RES, CBN 1/2P 220 BK
593B	R606	5135-102522	RES, CBN 1/2P 1K I IB BB
594	R607	5135-122522	RES, CBN 1/2P 1.2K
594	R608	5135-122522	RES, CBN 1/2P 1.2K
595	R609	5135-220522	RES, CBN 1/2P 22
595	R610	5135-220522	RES, CBN 1/2P 22
594	R611	5135-122522	RES, CBN 1/2P 1.2K
594	R612	5135-122522	RES, CBN 1/2P 1.2K
596	R613	5135-473522	RES, CBN 1/2P 47K
596	R614	5135-473522	RES, CBN 1/2P 47K
597	R615	5135-820522	RES, CBN 1/2P 82
597	R616	5135-820522	RES, CBN 1/2P 82
597	R617	5135-820522	RES, CBN 1/2P 82
597	R618	5135-820522	RES, CBN 1/2P 82
059B	R619	5232-102J16P	RES, CBN 1/6P 1K I IB BB
059B	R620	5232-102J16P	RES, CBN 1/6P 1K I IB BB
599	R621	5135-821522	RES, CBN 1/2P 820
599	R622	5135-821522	RES, CBN 1/2P 820
600	R623	5135-393522	RES, CBN 1/2P 39K
600	R624	5135-393522	RES, CBN 1/2P 39K
601	R625	5135-564522	RES, CBN 1/2P 560K
601	R626	5135-564522	RES, CBN 1/2P 560K
602	R627	5135-334522	RES, CBN 1/2P 330K
602	R628	5135-334522	RES, CBN 1/2P 330K
603	R629	5135-102522	RES, CBN 1/2P 1K
603	R630	5135-102522	RES, CBN 1/2P 1K
604	R631	5135-333522	RES, CBN 1/2P 33K
604	R632	5135-333522	RES, CBN 1/2P 33K
603	R633	5135-102522	RES, CBN 1/2P 1K
603	R634	5135-102522	RES, CBN 1/2P 1K
605	R635	5135-222522	RES, CBN 1/2P 2.2K
605	R636	5135-222522	RES, CBN 1/2P 2.2K
606	R637	5135-472522	RES, CBN 1/2P 4.7K
606	R638	5135-472522	RES, CBN 1/2P 4.7K
607	R639	5135-820522	RES, CBN 1/2P 82
607	R640	5135-820522	RES, CBN 1/2P 82
610	⚠R641	5102-1814715	RES, FUSE 180
610	⚠R642	5102-1814715	RES, FUSE 180
608	R643	5232-105J16P	RES, CBN 1/6P 1M
608	R644	5232-105J16P	RES, CBN 1/6P 1M
611	⚠R651	5102-1005116	RES, FUSE 10
611	⚠R652	5102-1005116	RES, FUSE 10
603	R655	5135-102522	RES, CBN 1/2P 1K
603	R656	5135-102522	RES, CBN 1/2P 1K
603	R657	5135-102522	RES, CBN 1/2P 1K
603	R658	5135-102522	RES, CBN 1/2P 1K
605	R681	5135-222522	RES, CBN 1/2P 2.2K
605	R682	5135-222522	RES, CBN 1/2P 2.2K
		TRANSISTORS	
561	Q601	5613-2320L(F)	XISTOR, NPN R
561	Q602	5613-2320L(F)	XISTOR, NPN R
563	Q603	5611-999L(F)	XISTOR, PNP R
563	Q604	5611-999L(F)	XISTOR, PNP R
564	Q605	5611-999(F)	XISTOR, PNP R
564	Q606	5611-999(F)	XISTOR, PNP R
562	Q607	5613-2320(F)	XISTOR, NPN R
562	Q608	5613-2320(F)	XISTOR, NPN R
562	Q609	5613-2320(F)	XISTOR, NPN R

Ser. No.	Ref. No.	Part No.	Description
562	Q610	5613-2320(F)	XISTOR, NPN R
562	Q611	5613-2320(F)	XISTOR, NPN R
562	Q612	5613-2320(F)	XISTOR, NPN R
565	Q613	5612-941(Q)	XISTOR, PNP A
566	Q614	5614-1266(Q)	XISTOR, NPN A
		DIODES	
569	D601	5635-HZ15-2L	DIODE, ZENER
569	D602	5635-HZ15-2L	DIODE, ZENER
570	D603	5631-1SS133	DIODE, DET
570	D604	5631-1SS133	DIODE, DET
		MISCELLANEOUS	
938	CN402	4443-0201141	CONNECTOR
613	CN601A	4443-01701012	CONNECTOR
614	CN602A	4443-01701007	CONNECTOR
912	△J2	4484-46	PIN JACK, 4P
914	△J3	4482-0133	PIN JACK, 2P

PCB-3 MONITOR P.C. BOARD

		CAPACITORS	
838	C811	5354-104593	CAP, MYL .1μ
838	C813	5354-104593	CAP, MYL .1μ
049B	C817	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
049B	C818	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
		RESISTORS	
845B	R859	5232-102J16P	RES, CBN 1/6P 1K (I) (IB) (BB)
845B	R860	5232-102J16P	RES, CBN 1/6P 1K (I) (IB) (BB)
845B	R869	5232-102J16P	RES, CBN 1/6P 1K (I) (IB) (BB)
845B	R870	5232-102J16P	RES, CBN 1/6P 1K (I) (IB) (BB)
842	R878	5135-105522	RES, CBN 1/2P 1M
850	R882	5232-105J16P	RES, CBN 1/6P 1M
847	R883	5232-104J16P	RES, CBN 1/6P 100K
845	R887	5232-102J16P	RES, CBN 1/6P 1K
845	R888	5232-102J16P	RES, CBN 1/6P 1K
845	R889	5232-102J16P	RES, CBN 1/6P 1K
845	R890	5232-102J16P	RES, CBN 1/6P 1K
		TRANSISTORS	
833	Q821	5616-2SK364BL	FET, N-CH
833	Q822	5616-2SK364BL	FET, N-CH
833	Q825	5616-2SK364BL	FET, N-CH
833	Q826	5616-2SK364BL	FET, N-CH
834	Q830	5611-UN4112	XISTOR, PNP R
		DIODES	
835	D861	5631-1S2473	DIODE, DET
835	D862	5631-1S2473	DIODE, DET
835	D865	5631-1S2473	DIODE, DET
835	D866	5631-1S2473	DIODE, DET
836	D883	5631-1SS133	DIODE, DET
836	D884	5631-1SS133	DIODE, DET
		MISCELLANEOUS	
849	CN802A	4443-01701016	CONNECTOR
913	△J4	4484-46	PIN JACK, 4P
913	△J5	4484-46	PIN JACK, 4P

PCB-4 SUB WOOFER P.C. BOARD

		CAPACITORS	
058B	C825	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
058B	C826	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
		RESISTORS	
479	R751	5135-470522	RES, CBN 1/2P 47
480	R752	5135-473522	RES, CBN 1/2P 47K
481	R753	5135-271522	RES, CBN 1/2P 270
486	R771	5135-392522	RES, CBN 1/2P 3.9K
		TRANSISTOR	
447	Q751	5611-UN411L	XISTOR, PNP R
		MISCELLANEOUS	
945	CN104	4443-030185	CONNECTOR
551	J101	4451-00184	JACK, 1P
551	J102	4451-00184	JACK, 1P
552	△J103	4489-00705002	PIN JACK, MLT
556	PH701	5624-ON3161(R	PHOTO COUPLER

Ser. No.	Ref. No.	Part No.	Description

PCB-5 MAIN P.C. BOARD

		CAPACITORS	
766	C3	5362-103048	CAP, CER .01μ
766	C4	5362-103048	CAP, CER .01μ
765	C5	5341-S08FM688	CAP, ELE 6800μ/50V
765	C6	5341-S08FM688	CAP, ELE 6800μ/50V
748	C21	5345-106F041	CAP, MINI ELE 10μ/50V
748	C22	5345-106F041	CAP, MINI ELE 10μ/50V
749	C23	5345-107B041	CAP, MINI ELE 100μ/10V
750	C24	5345-105F041	CAP, MINI ELE 1μ/50V
751	C25	5354-683J1HM	CAP, MYL .068μ
751	C26	5354-683J1HM	CAP, MYL .068μ
747	C27	5345-105F0951	CAP, MINI ELE 1μ/50V
696	C401	5345-476B0951	CAP, MINI ELE 47μ/10V
696	C402	5345-476B0951	CAP, MINI ELE 47μ/10V
699	C403	5359-6805851	CAP, PPP 68p
699	C404	5359-6805851	CAP, PPP 68p
698	C405	5345-106C0951	CAP, MINI ELE 10μ/16V
698	C406	5345-106C0951	CAP, MINI ELE 10μ/16V
700	C407	5353-050934	CAP, MCA 1p
700	C408	5353-050934	CAP, MCA 1p
697	C409	5345-477A0952	CAP, MINI ELE 470μ/6.3V
697	C410	5345-477A0952	CAP, MINI ELE 470μ/6.3V
703	C411	5359-1015851	CAP, PPP 100p
703	C412	5359-1015851	CAP, PPP 100p
704	C413	5345-476F041	CAP, MINI ELE 47μ/50V
704	C414	5345-476F041	CAP, MINI ELE 47μ/50V
704	C415	5345-476F041	CAP, MINI ELE 47μ/50V
704	C416	5345-476F041	CAP, MINI ELE 47μ/50V
701	C417	5354-104593	CAP, MYL .1μ
701	C418	5354-104593	CAP, MYL .1μ
701	C419	5354-104593	CAP, MYL .1μ
701	C420	5354-104593	CAP, MYL .1μ
705	C421	5345-475D0951	CAP, MINI ELE 4.7μ/25V
705	C422	5345-475D0951	CAP, MINI ELE 4.7μ/25V
043B	C438	5354-103K1HM	CAP, MYL .01μ (I) (IB) (BB)
		RESISTORS	
753	R21	5135-471522	RES, CBN 1/2P 470
754	R22	5135-392522	RES, CBN 1/2P 3.9K
755	R23	5135-332522	RES, CBN 1/2P 3.3K
756	R24	5135-472522	RES, CBN 1/2P 4.7K
757	R25	5135-104522	RES, CBN 1/2P 100K
758	R26	5135-683522	RES, CBN 1/2P 68K
759	R27	5135-333522	RES, CBN 1/2P 33K
762	R33	5135-102522	RES, CBN 1/2P 1K
762	R34	5135-102522	RES, CBN 1/2P 1K
763	R35	5135-911522	RES, CBN 1/2P 910
763	R36	5135-911522	RES, CBN 1/2P 910
752	R37	5135-331522	RES, CBN 1/2P 330
752	R38	5135-331522	RES, CBN 1/2P 330
756	R39	5135-472522	RES, CBN 1/2P 4.7K
756	R40	5135-472522	RES, CBN 1/2P 4.7K
757	R41	5135-104522	RES, CBN 1/2P 100K
758	R42	5135-683522	RES, CBN 1/2P 68K
756	R43	5135-472522	RES, CBN 1/2P 4.7K
756	R44	5135-472522	RES, CBN 1/2P 4.7K
767	R45	5135-222522	RES, CBN 1/2P 2.2K
711	R401	5135-333522	RES, CBN 1/2P 33K
711	R402	5135-333522	RES, CBN 1/2P 33K
712	R403	5135-331522	RES, CBN 1/2P 330 (BK)
712B	R403	5135-102522	RES, CBN 1/2P 1K (I) (IB) (BB)
712	R404	5135-331522	RES, CBN 1/2P 330 (BK)
712B	R404	5135-102522	RES, CBN 1/2P 1K (I) (IB) (BB)
713	R405	5135-471522	RES, CBN 1/2P 470
713	R406	5135-471522	RES, CBN 1/2P 470
713	R407	5135-471522	RES, CBN 1/2P 470
713	R408	5135-471522	RES, CBN 1/2P 470
714	R409	5135-152522	RES, CBN 1/2P 1.5K
714	R410	5135-152522	RES, CBN 1/2P 1.5K
714	R411	5135-152522	RES, CBN 1/2P 1.5K
714	R412	5135-152522	RES, CBN 1/2P 1.5K
715	R413	5135-152522	RES, CBN 1/2P 1.5K
715	R414	5135-152522	RES, CBN 1/2P 1.5K
716	R415	5135-561522	RES, CBN 1/2P 560
716	R416	5135-561522	RES, CBN 1/2P 560

Ser. No.	Ref. No.	Part No.	Description
716	R417	5135-561522	RES, CBN 1/2P 560
716	R418	5135-561522	RES, CBN 1/2P 560
716	R419	5135-561522	RES, CBN 1/2P 560
716	R420	5135-561522	RES, CBN 1/2P 560
716	R421	5135-561522	RES, CBN 1/2P 560
716	R422	5135-561522	RES, CBN 1/2P 560
716	R423	5135-561522	RES, CBN 1/2P 560
716	R424	5135-561522	RES, CBN 1/2P 560
717	△R425	5102-5605116	RES, FUSE 56
717	△R426	5102-5605116	RES, FUSE 56
717	△R427	5102-5605116	RES, FUSE 56
717	△R428	5102-5605116	RES, FUSE 56
718	R429	5135-223522	RES, CBN 1/2P 22K
718	R430	5135-223522	RES, CBN 1/2P 22K
718	R431	5135-223522	RES, CBN 1/2P 22K
718	R432	5135-223522	RES, CBN 1/2P 22K
720	R433	5135-152522	RES, CBN 1/2P 1.5K
720	R434	5135-152522	RES, CBN 1/2P 1.5K
719	R435	5135-271522	RES, CBN 1/2P 270
719	R436	5135-271522	RES, CBN 1/2P 270
721	△R437	5102-8205116	RES, FUSE 82
721	△R438	5102-8205116	RES, FUSE 82
721	△R439	5102-8205116	RES, FUSE 82
721	△R440	5102-8205116	RES, FUSE 82
722	R441	5135-820522	RES, CBN 1/2P 82
722	R442	5135-820522	RES, CBN 1/2P 82
730	R445	5275-S040JR27	RES, CEM 5P .27
730	R446	5275-S040JR27	RES, CEM 5P .27
730	R447	5275-S040JR27	RES, CEM 5P .27
730	R448	5275-S040JR27	RES, CEM 5P .27
726	R449	5135-100522	RES, CBN 1/2P 10
726	R450	5135-100522	RES, CBN 1/2P 10
731	R451	5171-100571	RES, MTL 1P 10
731	R452	5171-100571	RES, MTL 1P 10
724	R455	5135-271522	RES, CBN 1/2P 270
724	R456	5135-271522	RES, CBN 1/2P 270
725	R457	5135-103522	RES, CBN 1/2P 10K
725	R458	5135-103522	RES, CBN 1/2P 10K
723	R459	5135-333522	RES, CBN 1/2P 33K
723	R460	5135-333522	RES, CBN 1/2P 33K
723	R465	5135-333522	RES, CBN 1/2P 33K
723	R466	5135-333522	RES, CBN 1/2P 33K
068B	△R467	5102-4R75713	RES, FUSE 4.7 I IB BB
068B	△R468	5102-4R75713	RES, FUSE 4.7 I IB BB
068B	△R469	5102-4R75713	RES, FUSE 4.7 I IB BB
068B	△R470	5102-4R75713	RES, FUSE 4.7 I IB BB
		TRANSISTORS	
741	Q21	5611-1309A(R)	XISTOR, PNP R
742	Q22	5613-3311A(R)	XISTOR, NPN R
743	Q23	5613-2240(BL)	XISTOR, NPN R
744	Q24	5611-970(BL)	XISTOR, PNP R
743	Q27	5613-2240(BL)	XISTOR, NPN R
743	Q28	5613-2240(BL)	XISTOR, NPN R
744	Q29	5611-970(BL)	XISTOR, PNP R
683	Q401	5611-970(BL)	XISTOR, PNP R
683	Q402	5611-970(BL)	XISTOR, PNP R
683	Q403	5611-970(BL)	XISTOR, PNP R
683	Q404	5611-970(BL)	XISTOR, PNP R
681	Q405	5613-2240(BL)	XISTOR, NPN R
681	Q406	5613-2240(BL)	XISTOR, NPN R
681	Q407	5613-2240(BL)	XISTOR, NPN R
681	Q408	5613-2240(BL)	XISTOR, NPN R
686	Q409	5612-646A(C)	XISTOR, PNP A
686	Q410	5612-646A(C)	XISTOR, PNP A
685	Q411	5614-666A(C)	XISTOR, NPN A
685	Q412	5614-666A(C)	XISTOR, NPN A
687	Q413	5613-945(K)	XISTOR, NPN R
687	Q414	5613-945(K)	XISTOR, NPN R
688	Q415	5614-667A(C)	XISTOR, NPN A
688	Q416	5614-667A(C)	XISTOR, NPN A
689	Q417	5612-647A(C)	XISTOR, PNP A
689	Q418	5612-647A(C)	XISTOR, PNP A
690	Q419	5613-3181(O)	XISTOR, NPN R
690	Q420	5613-3181(O)	XISTOR, NPN R
692	Q421	5611-1264(O)	XISTOR, PNP R
692	Q422	5611-1264(O)	XISTOR, PNP R
684	Q423	5611-999(F)	XISTOR, PNP R
684	Q424	5611-999(F)	XISTOR, PNP R
684	Q425	5611-999(F)	XISTOR, PNP R
684	Q426	5611-999(F)	XISTOR, PNP R
		DIODES	
764	D1	5685-RBV-602	SILICON, BRIG
745	D21	5636-1S2471	DIODE, SWITCH
746	D22	5635-HZ6B1L	DIODE, ZENER
694	D401	5631-1S2473	DIODE, DET
694	D402	5631-1S2473	DIODE, DET
		COILS	
707	L401	5991-7165	SPRING COIL
707	L402	5991-7165	SPRING COIL
		CONTROLS	
729	VR401	5101-50101930	RES, SEMI FIX 500
729	VR402	5101-50101930	RES, SEMI FIX 500
		MISCELLANEOUS	
921	CW401	4163-S0204351	CONNECTOR W/W
923	CW403	4163-0135027	CONNECTOR W/W
924	CW404	4163-0135025	CONNECTOR W/W
925	CW413	4163-0122024	CONNECTOR W/W
926	CW414	4163-0122026	CONNECTOR W/W
966	JL420	4242-R0103141	JUMPER LEAD
770	TM415	4214-11013	TERMINAL
770	TM415L	4214-11013	TERMINAL
770	TM415R	4214-11013	TERMINAL
769	TP401	4214-132	TERMINAL
769	TP402	4214-132	TERMINAL
769	TP403	4214-132	TERMINAL
769	TP404	4214-132	TERMINAL

PCB-6 TONE CONTROL P.C. BOARD

		CAPACITORS	
631	C501	5345-226C0951	CAP, MINI ELE 22 μ/16V
631	C502	5345-226C0951	CAP, MINI ELE 22 μ/16V
629	C503	5345-476C0951	CAP, MINI ELE 47 μ/16V
629	C504	5345-476C0951	CAP, MINI ELE 47 μ/16V
632	C505	5345-225F0951	CAP, MINI ELE 2.2 μ/50V
632	C506	5345-225F0951	CAP, MINI ELE 2.2 μ/50V
636	C507	5354-273J1HM	CAP, MYL .027 μ
636	C508	5354-273J1HM	CAP, MYL .027 μ
635	C509	5354-154593	CAP, MYL .15 μ
635	C510	5354-154593	CAP, MYL .15 μ
638	C511	5354-682J1HM	CAP, MYL 6800p
638	C512	5354-682J1HM	CAP, MYL 6800p
637	C513	5354-393J1HM	CAP, MYL .039 μ
637	C514	5354-393J1HM	CAP, MYL .039 μ
630	C515	5345-226C0951	CAP, MINI ELE 22 μ/16V
630	C516	5345-226C0951	CAP, MINI ELE 22 μ/16V
640	C517	5353-020934	CAP, MCA 2p
640	C518	5353-020934	CAP, MCA 2p
041B	C521	5354-103K1HM	CAP, MYL .01 μ I IB BB
041B	C522	5354-103K1HM	CAP, MYL .01 μ I IB BB
067B	C523	5354-103K1HM	CAP, MYL .01 μ I IB BB
643	C563	5359-1015851	CAP, PPP 100p
643	C564	5359-1015851	CAP, PPP 100p
633	C581	5345-337D045	CAP, MINI ELE 330 μ/25V
633	C582	5345-337D045	CAP, MINI ELE 330 μ/25V
633	C583	5345-337D045	CAP, MINI ELE 330 μ/25V
633	C584	5345-337D045	CAP, MINI ELE 330 μ/25V
		RESISTORS	
651	R501	5135-154522	RES, CBN 1/2P 150K
651	R502	5135-154522	RES, CBN 1/2P 150K
652	R503	5135-102522	RES, CBN 1/2P 1K
652	R504	5135-102522	RES, CBN 1/2P 1K
653	R505	5135-101522	RES, CBN 1/2P 100
653	R506	5135-101522	RES, CBN 1/2P 100
654	R507	5135-820522	RES, CBN 1/2P 82
654	R508	5135-820522	RES, CBN 1/2P 82
655	R509	5135-274522	RES, CBN 1/2P 270K
655	R510	5135-274522	RES, CBN 1/2P 270K
652	R511	5135-102522	RES, CBN 1/2P 1K
652	R512	5135-102522	RES, CBN 1/2P 1K
658	R513	5135-331522	RES, CBN 1/2P 330
658	R514	5135-331522	RES, CBN 1/2P 330

Ser. No.	Ref. No.	Part No.	Description
657	R515	5135-222522	RES. CBN 1/2P 2.2K
657	R516	5135-222522	RES. CBN 1/2P 2.2K
658	R517	5135-331522	RES. CBN 1/2P 330
658	R518	5135-331522	RES. CBN 1/2P 330
659	R519	5135-221522	RES. CBN 1/2P 220
659	R520	5135-221522	RES. CBN 1/2P 220
660	R521	5135-122522	RES. CBN 1/2P 1.2K
660	R522	5135-122522	RES. CBN 1/2P 1.2K
661	R523	5135-331522	RES. CBN 1/2P 330
661	R524	5135-331522	RES. CBN 1/2P 330
656	R525	5135-473522	RES. CBN 1/2P 47K
656	R526	5135-473522	RES. CBN 1/2P 47K
662	R527	5135-272522	RES. CBN 1/2P 2.7K
662	R528	5135-272522	RES. CBN 1/2P 2.7K
663	R529	5135-153522	RES. CBN 1/2P 15K
663	R530	5135-153522	RES. CBN 1/2P 15K
658	R531	5135-331522	RES. CBN 1/2P 330 BK
042B	R531	5135-102522	RES. CBN 1/2P 1K I IB BB
658	R532	5135-331522	RES. CBN 1/2P 330 BK
042B	R532	5135-102522	RES. CBN 1/2P 1K I IB BB
651	R535	5135-154522	RES. CBN 1/2P 150K
651	R536	5135-154522	RES. CBN 1/2P 150K
656	R547	5135-473522	RES. CBN 1/2P 47K
656	R548	5135-473522	RES. CBN 1/2P 47K
666	R561	5135-105522	RES. CBN 1/2P 1M
666	R562	5135-105522	RES. CBN 1/2P 1M
667	R563	5135-331522	RES. CBN 1/2P 330
667	R564	5135-331522	RES. CBN 1/2P 330
736	R565	5135-224522	RES. CBN 1/2P 220K
735	R566	5135-104522	RES. CBN 1/2P 100K
737	R567	5135-223522	RES. CBN 1/2P 22K
738	R568	5135-153522	RES. CBN 1/2P 15K
739	R571	5135-104522	RES. CBN 1/2P 100K
740	R572	5135-100522	RES. CBN 1/2P 10
740	R573	5135-100522	RES. CBN 1/2P 10
665	△R581	5102-1215116	RES. FUSE 120
665	△R582	5102-1215116	RES. FUSE 120
664	R583	5135-562522	RES. CBN 1/2P 5.6K
664	R584	5135-562522	RES. CBN 1/2P 5.6K
		TRANSISTORS	
621	Q501	5613-2320L(F)	XISTOR, NPN R
621	Q502	5613-2320L(F)	XISTOR, NPN R
623	Q503	5611-999(F)	XISTOR, PNP R
623	Q504	5611-999(F)	XISTOR, PNP R
622	Q505	5611-999L(F)	XISTOR, PNP R
622	Q506	5611-999L(F)	XISTOR, PNP R
649	Q561	5616-2SK364BL	FET, N-CH
649	Q562	5616-2SK364BL	FET, N-CH
650	Q563	5611-UN4112	XISTOR, PNP R
650	Q564	5611-UN4112	XISTOR, PNP R
625	Q581	5614-667(C)	XISTOR, NPN A
626	Q582	5612-647(C)	XISTOR, PNP A
		DIODES	
627	D581	5635-HZ15-2L	DIODE, ZENER
627	D582	5635-HZ15-2L	DIODE, ZENER
628	D583	5631-1S2473	DIODE, DET
		CONTROLS	
900	VR501 /502	5113-S0906503	RES. V CBN 16 50K
894	VR505 /506	5113-S0904104	RES. V CBN 16 100K
897	VR507 /508	5113-S0905503	RES. V CBN 16 50K
		MISCELLANEOUS	
942	CN401	4443-0401141	CONNECTOR
933	CW105	4163-S0203141	CONNECTOR W/W
947	CW109	4163-0115036	CONNECTOR W/W
922	CW402	4163-S0202301	CONNECTOR W/W
951	H415	2240-Z031	HOLDER
951	H416A	2240-Z031	HOLDER
951	H417A	2240-Z031	HOLDER
952	H501	2240-Z031	HOLDER
063B	LUG	4211-4	LUG, W-4 I IB BB
645	LUG2	4211-4	LUG
647	TM416	4214-11021	TERMINAL

Ser. No.	Ref. No.	Part No.	Description
		PCB-7 VOLUME P.C. BOARD	
		CAPACITORS	
675	C541	5354-104593	CAP, MYL .1 μ
646	C543	5354-823J1HM	CAP, MYL .082 μ
646	C544	5354-823J1HM	CAP, MYL .082 μ
		RESISTORS	
673	R543	5135-273522	RES, CBN 1/2P 27K
673	R544	5135-273522	RES, CBN 1/2P 27K
674	R545	5135-472522	RES, CBN 1/2P 4.7K
674	R546	5135-472522	RES, CBN 1/2P 4.7K
		CONTROLS	
891	VR503 /504	6161-00701	VR BLOCK
		MISCELLANEOUS	
934	CW504	4163-S0203101	CONNECTOR W/W
953	H416B	2240-Z031	HOLDER
953	H417B	2240-Z031	HOLDER
960	JL419	4242-R0106121	JUMPER LEAD
		PCB-8 PRIMARY P.C. BOARD	
		CAPACITOR	
787	△C1	5352-S010M103	CAP, MTL .01 μ BK
		RESISTORS	
788	△R1	5135-335522	RES, CBN 1/2P 3.3M BK
794	R11	5135-103522	RES, CBN 1/2P 10K
795	R12	5135-332522	RES, CBN 1/2P 3.3K
799	R14	5135-472522	RES, CBN 1/2P 4.7K
796	R15	5135-331522	RES, CBN 1/2P 330
797	R16	5135-221522	RES, CBN 1/2P 220
798	R17	5135-221522	RES, CBN 1/2P 220 BK
798B	R17	5135-222522	RES, CBN 1/2P 2.2K I IB BB
		TRANSISTORS	
791	Q11	5614-667(C)	XISTOR, NPN A
792	Q12	5613-3311A(R)	XISTOR, NPN R
792	Q13	5613-3311A(R)	XISTOR, NPN R
780	Q14	5613-UN4212	XISTOR, NPN R
		DIODES	
793	D11	5631-1S2473	DIODE, DET BK
793	D12	5631-1S2473	DIODE, DET
793	D13	5631-1S2473	DIODE, DET
793	D16	5631-1S2473	DIODE, DET
		MISCELLANEOUS	
784	△FH1	4472-04501	HOLDER, FUSE
784	△FH2	4472-04501	HOLDER, FUSE
961	JL11	4242-R0404351	JUMPER LEAD
962	JL12	4242-R0406651	JUMPER LEAD
789	△RY1	4331-01702	RELAY, DC BK
048B	△S5	4411-00501102	SWITCH, ROTARY I IB BB
916	△SO1	4474-02901	SOCKET BK
790	TM1	4214-122	TERMINAL
790	TM2	4214-122	TERMINAL BK
790	TM3	4214-122	TERMINAL
790	TM4	4214-122	TERMINAL
790C	TM5	4214-122	TERMINAL I IB BB
		PCB-9 SECONDRY P.C. BOARD	
		CAPACITORS	
511	C51	5345-228D045	CAP, MINI ELE 2200 μ/25V
514	C54	5361-473ZF	CAP, CER .047 μ
514	C55	5361-473ZF	CAP, CER .047 μ
047B	C436	5354-103K1HM	CAP, MYL .01 μ I IB BB
047B	C437	5354-103K1HM	CAP, MYL .01 μ I IB BB
		DIODE	
505	△D51	5685-S1VB10	SILICON, BRIG
		MISCELLANEOUS	
943	CN100	4443-0201141	CONNECTOR
932	CW102	4163-S0202751	CONNECTOR W/W
930	CW408	4163-0130025	CONNECTOR W/W
927	CW409	4163-0130027	CONNECTOR W/W
929	CW410	4163-0125024	CONNECTOR W/W
536	△FH3	4472-04501	HOLDER, FUSE
537	△FH4	4472-04501	HOLDER, FUSE
783	S2	4421-02001022	SWITCH, SLIDE BK

Ser. No.	Ref. No.	Part No.	Description
PCB-10 HEADPHONE P.C. BOARD			
		RESISTORS	
732	R461	5135-102522	RES, CBN 1/2P 1K
732	R462	5135-102522	RES, CBN 1/2P 1K
732	R463	5135-102522	RES, CBN 1/2P 1K
732	R464	5135-102522	RES, CBN 1/2P 1K
733	R591	5135-822522	RES, CBN 1/2P 8.2K
733	R592	5135-822522	RES, CBN 1/2P 8.2K
734	R593	5135-102522	RES, CBN 1/2P 1K
734	R594	5135-102522	RES, CBN 1/2P 1K
		CAPACITORS	
044B	C431	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
044B	C432	5359-2215851	CAP, PPP 220p (I) (IB) (BB)
702	C591	5345-107B041	CAP, MINI ELE 100μ/10V
702	C592	5345-107B041	CAP, MINI ELE 100μ/10V
702	C593	5345-107B041	CAP, MINI ELE 100μ/10V
702	C594	5345-107B041	CAP, MINI ELE 100μ/10V
		MISCELLANEOUS	
956	CN418	4443-030185	CONNECTOR
954	H104	2240-Z031	HOLDER
911	△J1	4451-51501	JACK, 1P
908	S4	4431-A027610	SWITCH, PUSH
PCB-11 SPEAKER SWITCH P.C. BOARD			
		CAPACITOR	
046B	C435	5354-103K1HM	CAP, MYL .01μ (I) (IB) (BB)
		MISCELLANEOUS	
955	H418A	2240-Z031	HOLDER
965	JL401	4242-044005	JUMPER LEAD
903	S3	4411-00305103	SWITCH, ROTARY
064B	LUG	4211-4	LUG, W-7 (I) (IB) (BB)
PCB-12 SPEAKER TERMINAL P.C. BOARD			
		CAPACITORS	
045B	C433	5359-1015851	CAP, PPP 100p (I) (IB) (BB)
045B	C434	5359-1015851	CAP, PPP 100p (I) (IB) (BB)
		MISCELLANEOUS	
066B	LUG	4211-4	LUG, W-11 (I) (IB) (BB)
915	△TM402	4214-165	TERMINAL
PCB-14 FRONT P.C. BOARD			
		CAPACITORS	
487	C708	5361-223Z921	CAP, CER .022μ
488	C709	5345-476D041	CAP, MINI ELE 47μ/25V
462	C711	5361-300JCH	CAP, CER 30p
462	C712	5361-300JCH	CAP, CER 30p
457	C713	5345-225F041	CAP, MINI ELE 2.2μ/50V
		RESISTORS	
491	R719	5232-104J16P	RES, CBN 1/6P 100K
492	R721	5232-472J16P	RES, CBN 1/6P 4.7K
475	R722	5232-222J16P	RES, CBN 1/6P 2.2K
061B	R723	5232-331J16P	RES, CBN 1/6P 330 (I) (IB) (BB)
475	R725	5232-222J16P	RES, CBN 1/6P 2.2K
491	R735	5232-104J16P	RES, CBN 1/6P 100K
490	R754	5232-102J16P	RES, CBN 1/6P 1K
490	R755	5232-102J16P	RES, CBN 1/6P 1K
490	R756	5232-102J16P	RES, CBN 1/6P 1K
490	R757	5232-102J16P	RES, CBN 1/6P 1K
490	R758	5232-102J16P	RES, CBN 1/6P 1K
490	R759	5232-102J16P	RES, CBN 1/6P 1K
490	R760	5232-102J16P	RES, CBN 1/6P 1K
489	R767	5232-473J16P	RES, CBN 1/6P 47K
859	R801	5135-681522	RES, CBN 1/2P 680
859	R802	5135-681522	RES, CBN 1/2P 680
859	R803	5135-681522	RES, CBN 1/2P 680
859	R804	5135-681522	RES, CBN 1/2P 680
858	R805	5135-102522	RES, CBN 1/2P 1K
858	R806	5135-102522	RES, CBN 1/2P 1K
857	R808	5135-472522	RES, CBN 1/2P 4.7K
857	R809	5135-472522	RES, CBN 1/2P 4.7K
857	R830	5135-472522	RES, CBN 1/2P 4.7K
848	R838	5232-471J16P	RES, CBN 1/6P 470
858	R839	5135-102522	RES, CBN 1/2P 1K
		INTEGRATED CIRCUITS	
441	IC701	5654-T9301-20	IC, DIGITAL (BK)
441B	IC701	5654-T9301-27	IC, DIGITAL (I) (IB) (BB)
		TRANSISTORS	
852	Q801	5611-1309A(R)	XISTOR, PNP R
852	Q802	5611-1309A(R)	XISTOR, PNP R
851	Q809	5613-3311A(R)	XISTOR, NPN R
		DIODES	
451	D701	5631-1S2473	DIODE, DET
451	D702	5631-1S2473	DIODE, DET
451	D703	5631-1S2473	DIODE, DET
451	D704	5631-1S2473	DIODE, DET
451	D705	5631-1S2473	DIODE, DET
451	D706	5631-1S2473	DIODE, DET
451	D707	5631-1S2473	DIODE, DET
451	D708	5631-1S2473	DIODE, DET
451	D709	5631-1S2473	DIODE, DET (BK)
451	D710	5631-1S2473	DIODE, DET (BK)
451	D711	5631-1S2473	DIODE, DET
485	D713	5631-1SS133	DIODE, DET
062B	D719	5637-GL5HD41	LED (I) (IB) (BB)
854	D721	5631-1SS133	DIODE, DET
854	D723	5631-1SS133	DIODE, DET
854	D725	5631-1SS133	DIODE, DET
854	D727	5631-1SS133	DIODE, DET
837	D822	5631-1SS133	DIODE, DET
837	D823	5631-1SS133	DIODE, DET
837	D824	5631-1SS133	DIODE, DET
837	D825	5631-1SS133	DIODE, DET
839	D830	5631-1S2473	DIODE, DET
853	D831	5637-S2410E1	LED
853	D832	5637-S2410E1	LED
853	D833	5637-S2410E1	LED
853	D834	5637-S2410E1	LED
846	D835	5637-S2210S1	LED
846	D836	5637-S2210S1	LED
		MISCELLANEOUS	
463	CC701	5213-S0207221	C COMPOSITE
540	CN101B	4443-05401019	CONNECTOR
860	CN804A	4443-05501013	CONNECTOR
931	CW100	4163-S0202401	CONNECTOR W/W
531	FL701	5722-057	TUBE DISPLAY
554	LUG3	4211-4	LUG, W-701
555	△RCV1	6143-00802	RECEIV BLOCK
534	S11	4437-00603	SWITCH, PU-TC
534	S12	4437-00603	SWITCH, PU-TC
534	S13	4437-00603	SWITCH, PU-TC
534	S14	4437-00603	SWITCH, PU-TC
534	S15	4437-00603	SWITCH, PU-TC
534	S16	4437-00603	SWITCH, PU-TC
534	S17	4437-00603	SWITCH, PU-TC
534	S18	4437-00603	SWITCH, PU-TC
533	S19	4437-00604	SWITCH, PU-TC
533	S20	4437-00604	SWITCH, PU-TC
533	S21	4437-00604	SWITCH, PU-TC
533	S22	4437-00604	SWITCH, PU-TC
533	S23	4437-00604	SWITCH, PU-TC
534	S24	4437-00603	SWITCH, PU-TC
534	S25	4437-00603	SWITCH, PU-TC
855	S31	4437-00604	SWITCH, PU-TC
855	S32	4437-00604	SWITCH, PU-TC
855	S33	4437-00604	SWITCH, PU-TC
855	S34	4437-00604	SWITCH, PU-TC
855	S35	4437-00604	SWITCH, PU-TC
855	S36	4437-00604	SWITCH, PU-TC
449	X701	5691-00720027	XTAL, OSC
PCB-15 POWER SWITCH P.C. BOARD			
		MISCELLANEOUS	
944	CN11	4443-040185	CONNECTOR
964	JL13	4242-R0403101	JUMPER LEAD
906	S1	4431-A027610	SWITCH, PUSH

Ser. No.	Ref. No.	Part No.	Description
PCB-16 VOLUME INDICATOR P.C. BOARD			
		DIODE	
889	D15	5637-S2410E1	LED
		MISCELLANEOUS	
948	CW15	4163-01524002	CONNECTOR W/W
PCB-17 POWER INDICATOR P.C. BOARD			
		DIODE	
888	D14	5637-GL3ED8	LED

ABBREVIATIONS IN PARTS LIST

CAPACITORS

CAP. MINI ELE	: Electrolytic
CAP. CER	: Ceramic
CAP. PPP	: Polypropylene
CAP. MYL	: Mylar
CAP. MCA	: Mica
CAP. MINI BP	: Bipolar
CAP. ELE BP	: Electrolytic Bipolar
CAP. STY	: Polystyrene Film
CAP. SPE	: Special
CAP. TAN	: Tantalum
470μ	: 470μF
6800p	: 6800pF
.047μ	: 0.047μF

RESISTORS

RES. CBN 1/6P	: Carbon 1/6W
RES. FUSE	: Fuse
RES. CEM 5P	: Cement 5W
RES. MTL 1P	: Metal 1W
2.2K	: 2.2kΩ
220	: 220Ω

TRANSISTORS

XISTOR	: Transistor
FET	: Field Effect Transistor

CONTROLS

RES. V CBN	: Variable Carbon Resistor
RES. SEMI FIX	: Semi-fixed Resistor

CHASSIS MISCELLANEOUS

786	⚠F1	5732-252031	FUSE
535	⚠F2	5732-162031	FUSE
543	JL101	4242-S0319131	JUMPER LEAD
868	JL804	4242-S0313151	JUMPER LEAD
381	L251	5911-266	ANT COIL, BC
917	⚠P1	4161-71151	CORD W/PLUG (BK)
917	⚠P1	4161-7256	CORD W/PLUG (I) (IB)
917	⚠P1	4161-04100	CORD W/PLUG (BB)
771	⚠T1	5584-S9001	XFORMER, POWER (BK)
771	⚠T1	5584-S	XFORMER, POWER (I) (IB) (BB)

PACKAGE PARTS LIST

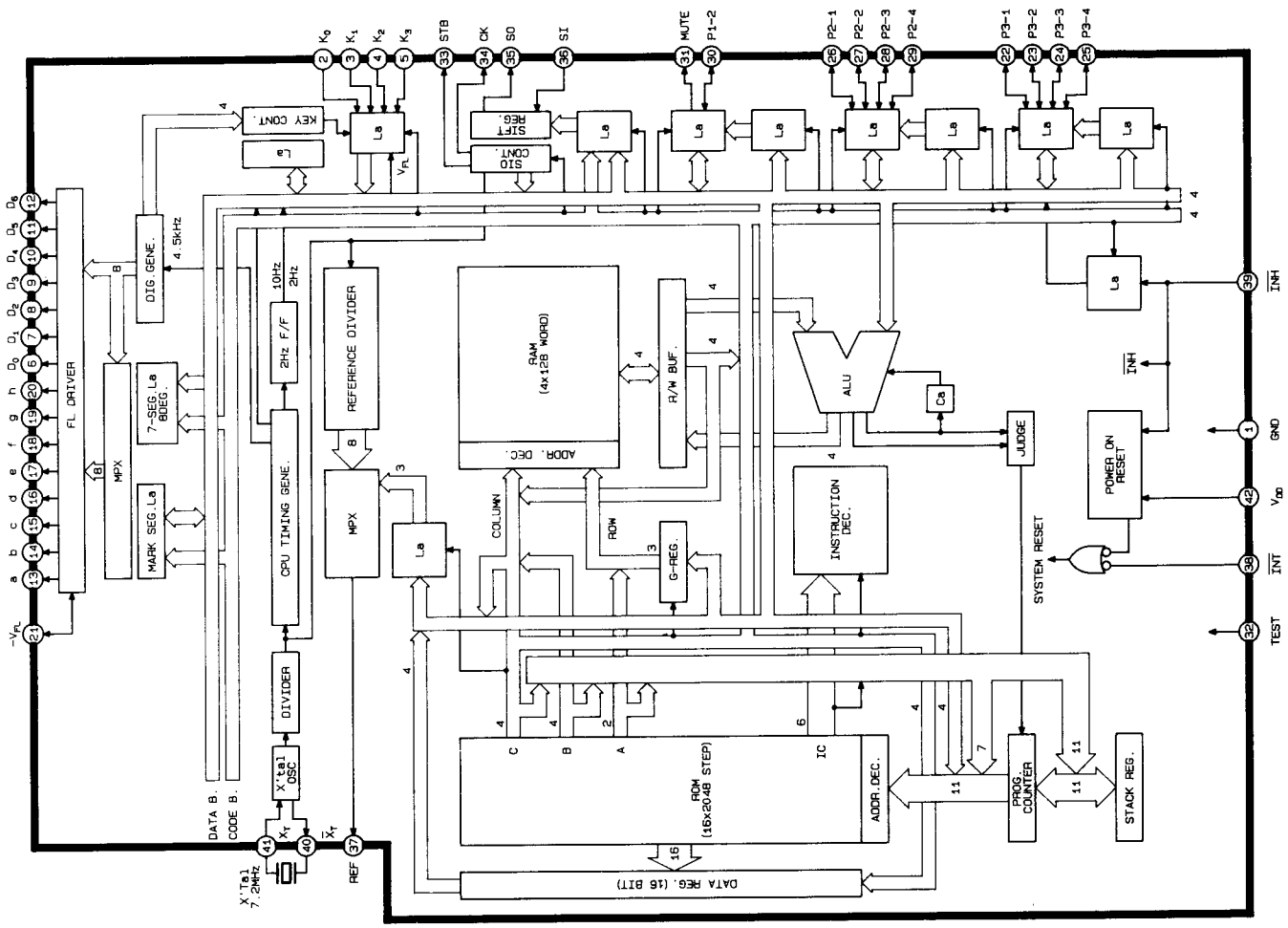
021	1756-06304	LABEL (I) (IB) (BB)
022	1756-03108	LABEL (I) (IB)
022	1756-03111	LABEL (BB)
027	1756-08501	LABEL (BB)
028	1111-J30319	OWNER GUIDE (BB)
029	1111-J30235	OWNER GUIDE (I) (IB) (BB)
111	1221-28014	CARTON BOX (BK)
111	1221-29906	CARTON BOX (I) (IB) (BB)
112	1222-7362	CUSHION
113	1222-7365	CUSHION
116	1223-R0120055	SOFT SHEET
117	1241-R0123350	POLYETHY BAG, OWNER GUIDE
118	1241-R0160600	POLYETHY BAG, SET
119	1111-J30337	OWNER GUIDE (BK)
119	1111-J30338	OWNER GUIDE (I) (IB) (BB)
120	1113-717004	OWNER CARD (BK)
121	1119-047	ATTACH SHEET, WARRANTY (BK)
122	1119-01201	ATTACH SHEET, UL SAFETY (BK)
123	1119-0137	ATTACH SHEET, SERVICE AGENCIES (BK)
548	1397-6	T FEEDER ANT
881	4191-0355	BATTERY, DRY
890	6142-02704	REMOTE CONTROL

NOTE

⚠ SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

IC BLOCK DIAGRAM / IC TERMINAL FUNCTIONS

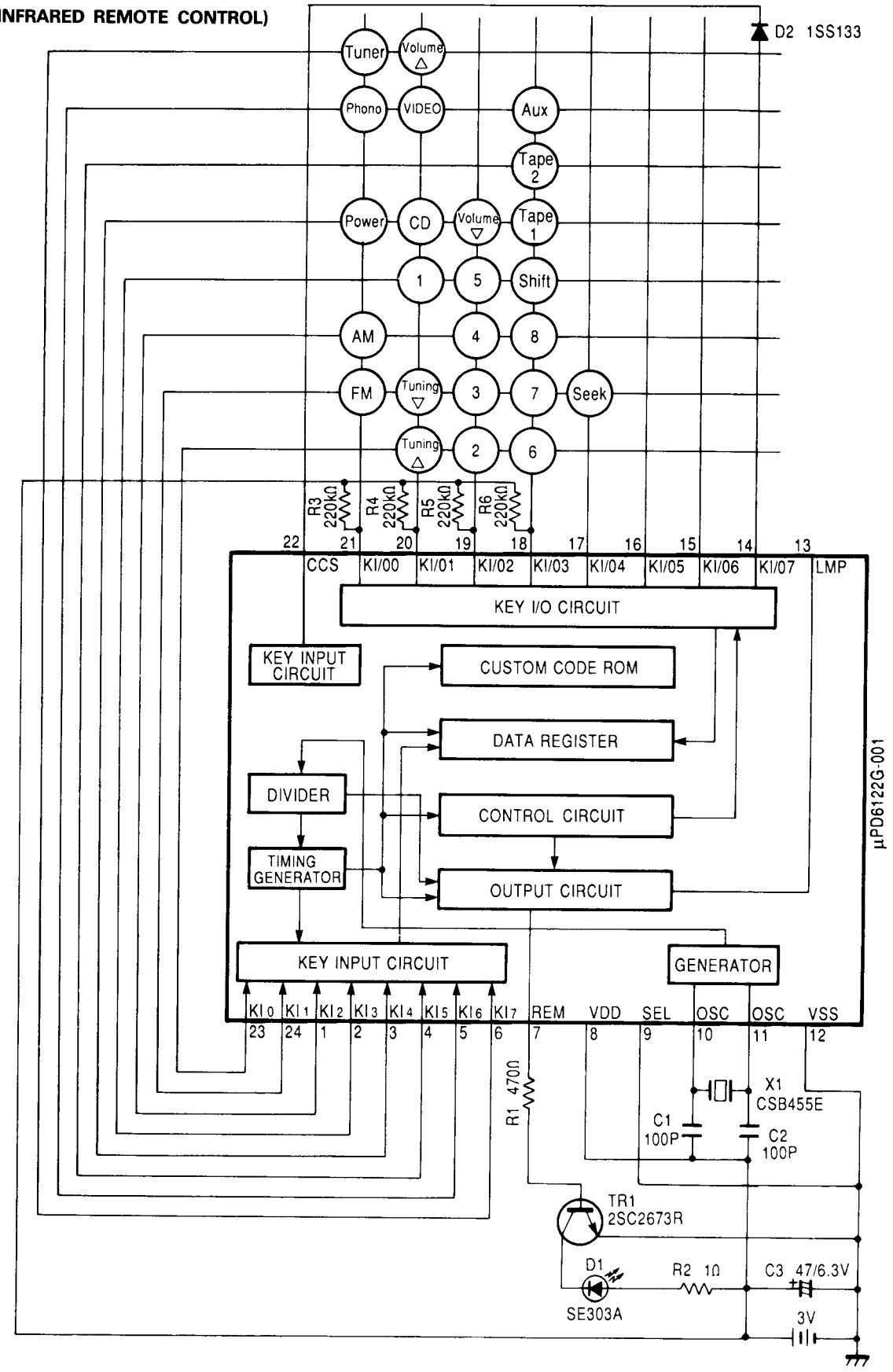
IC701 : TC9301AN-027 Micro Computer



Pin No.	Pin Name	I/O	Function
1	GND	—	GND pin
2	K0	I	4-bit key input port
3	K1	I	4-bit key input port
4	K2	I	4-bit key input port
5	K3	I	4-bit key input port
6	D0	O	Digit output
7	D1	O	Digit output
8	D2	O	Digit output
9	D3	O	Digit output
10	D4	O	Digit output
11	D5	O	Digit output
12	D6	O	Digit output
13	a	O	Segment output
14	b	O	Segment output
15	c	O	Segment output
16	d	O	Segment output
17	e	O	Segment output
18	f	O	Segment output
19	g	O	Segment output
20	h	O	Segment output
21	−VFL	I	Negative power terminal (4-bit key input port, digit output, segment output)

Pin No.	Pin Name	I/O	Function
22	P3-1	I/O	4-bit I/O port (3)
23	P3-2	I/O	4-bit I/O port (3)
24	P3-3	I/O	4-bit I/O port (3)
25	P3-4	I/O	4-bit I/O port (3)
26	P2-1	I/O	4-bit I/O port (2)
27	P2-2	I/O	4-bit I/O port (2)
28	P2-3	I/O	4-bit I/O port (2)
29	P2-4	I/O	4-bit I/O port (2)
30	P1-2	I/O	1-bit I/O port (1)
31	MUTE	O	1-bit muting signal output port
32	TEST	I	Test mode control input terminal
33	STB	O	Serial interface (strove pulse output)
34	CK	O	Serial interface (serial clock output)
35	SO	O	Serial interface (serial data output)
36	SI	I	Serial interface (serial data input)
37	REF	O	Reference frequency signal output terminal
38	$\overline{INT}$	I	Initialize input (system reset signal input terminal)
39	$\overline{INH}$	I	Inhibit input (select signal input port of radio mode)
40	$\overline{XT}$	—	Connect quartz oscillator
41	XT	—	Connect quartz oscillator
42	V_{DD}	I	Power supply terminal

SCHEMATIC DIAGRAM
(INFRARED REMOTE CONTROL)

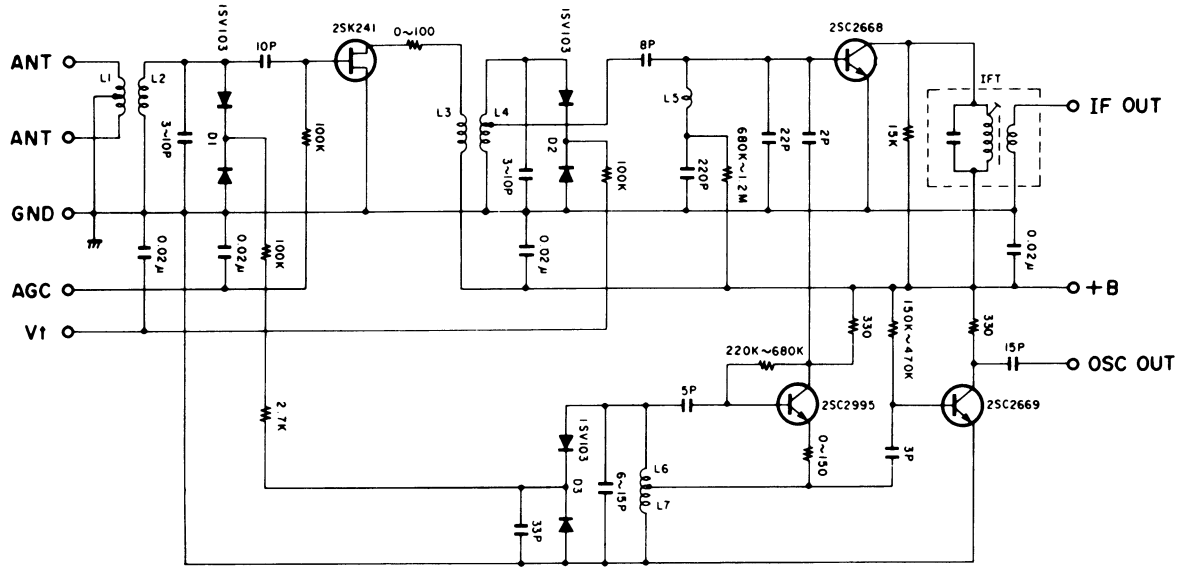


NOTE: Infrared Remote Control parts not available.
Schematic diagram supplied for reference only.

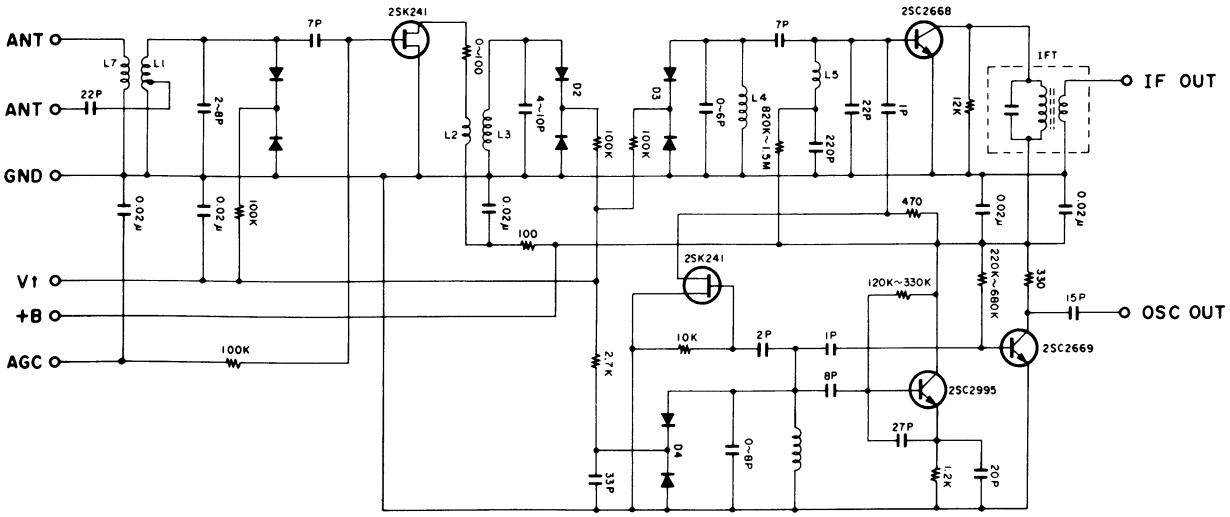
SCHEMATIC DIAGRAM

(FM TUNER PACK SECTION)

- For North America area model

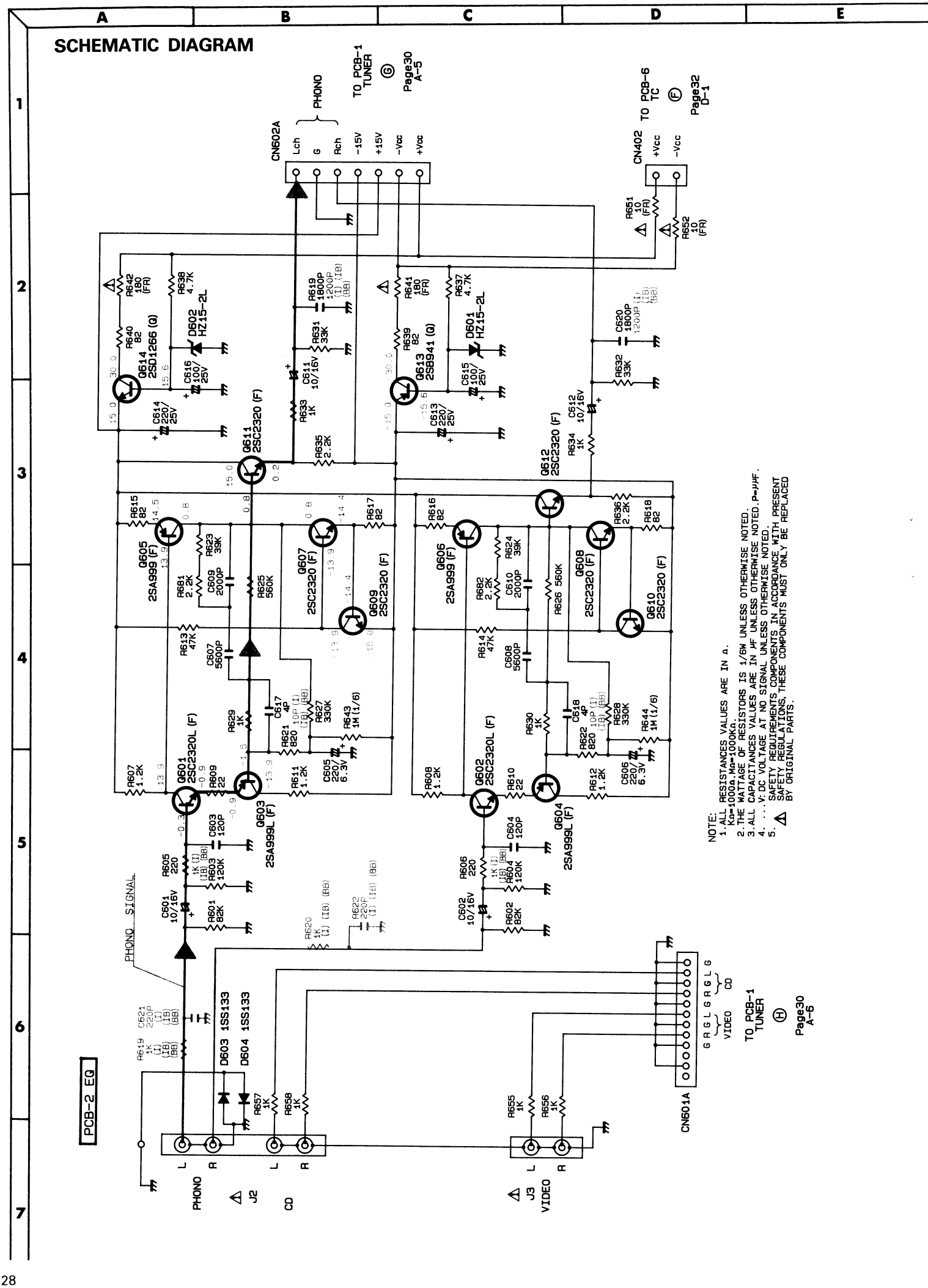


- For International and Australia models

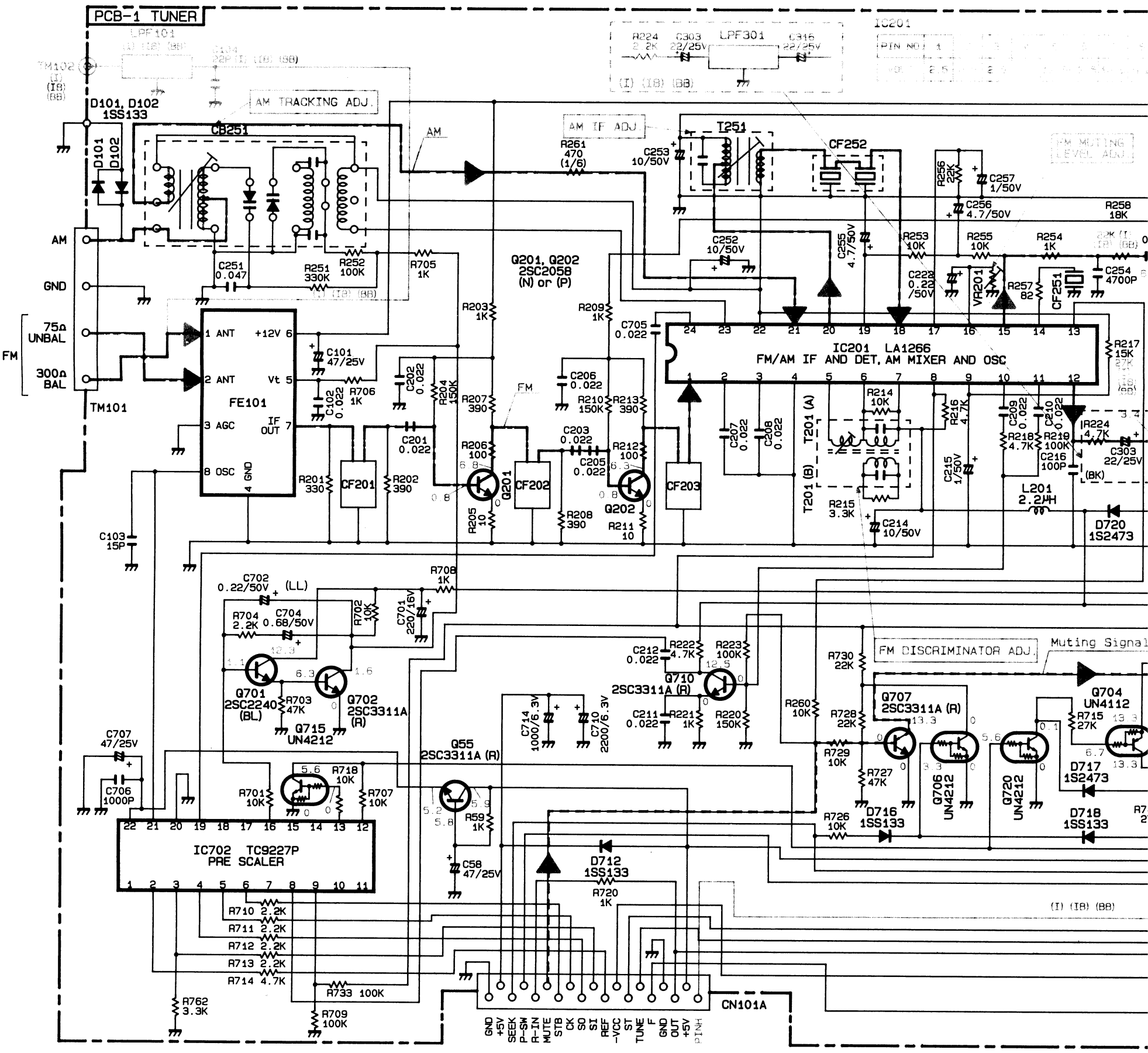


NOTE: Front End parts not available. Schematic diagram supplied for reference only.

SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

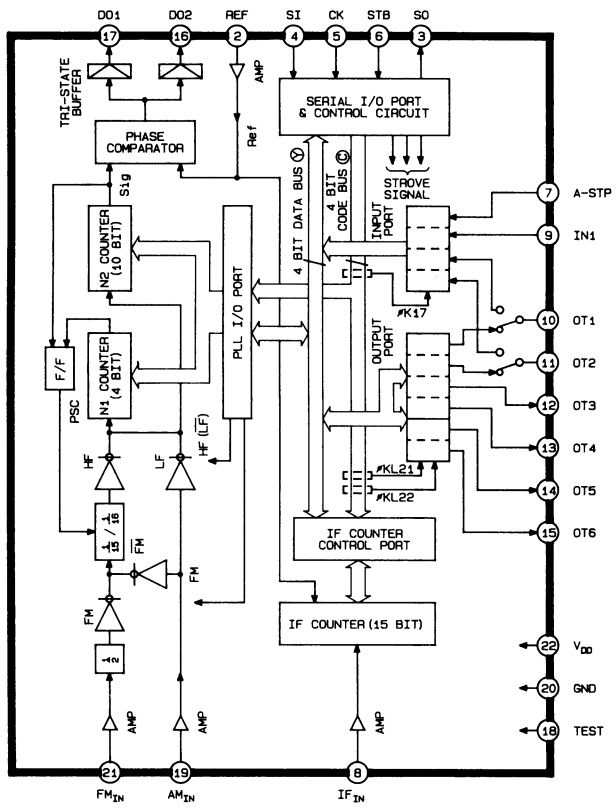


FROM PCB-14 FRONT Ⓐ

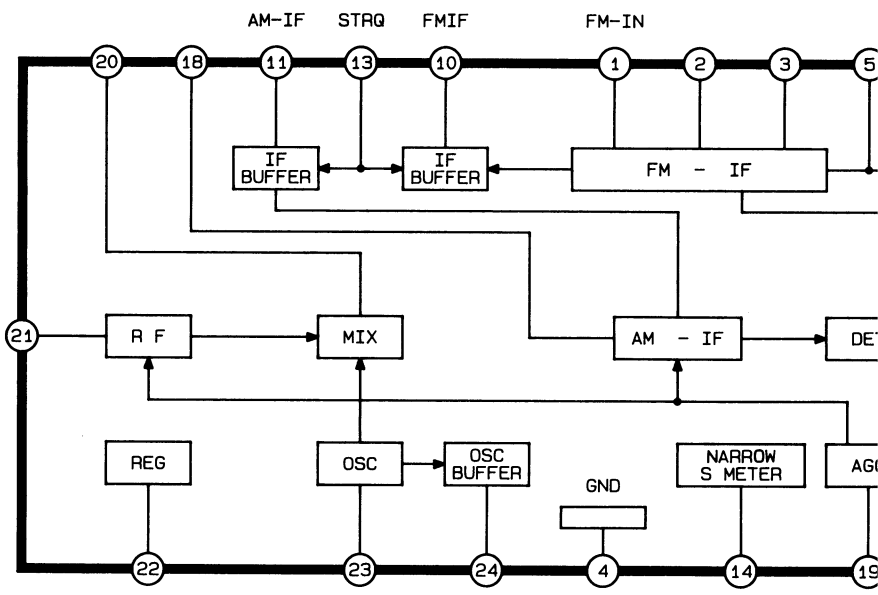
IC702

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VOLT.	—	2.6	0	0	0	0	—	2.5	4.5	—	—	5.1	0	—	---	1.1

IC702 : TC9227P Pre Scaler



IC201 : LA1266 FM/AM IF Amp. and Det., AM



H I J K L M N

FM MUTING LEVEL ADJ.

FM SEPARATION ADJ.

VR201 50KB
VR301 100KB

D302 1SS133

R316 10K C315 100P

D715 1SS133

R717 10K

R766 3.3K

Q705 UN4112

Q713 UN4212

D301 1SS133

C308 10/50V

C307 0.47/50V

R315 4.7K

C312 2.2/50V

C306 0.22/50V

VR301

R316 C315

CX301

R258 18K

C258 0.22/50V

22K (I) (IB) (BB)

C254 4700P

CF251

Q303 2SK364 (BL)

R301 1M

R217 15K

IC301 LA3410 FM MPX

16 15 14 13 12 11 10 9

1 2 3 4 5 6 7 8

C311 0.047

R307 ※3

R308 ※4

C309 ※5

C310 ※6

R309 1.8K

R305 100K

R306 100K

R310 1.8K

R304 ※2

R303 ※1

C304 22/25V

C305 47/25V

R732 10K

D714 1SS133

Q304 2SK364 (BL)

IR224 4.7K

C303 22/25V

(BK)

D720 1S2473

R302 1M

TUNER SIGNAL

D731 1S2473

R259 1.5K

R734 10K

Muting Signal

Q704 UN4112

R715 27K

D717 1S2473

D718 1SS133

R745 27K

R716 10K

D728 1S2473

Q708 UN4112

R744 100K

R768 4.7K

Q711 UN4112

Q712 2SA1309A (R)

R769 3.3K

D729 1SS133

Q714 UN4213

	(BK)	(I) (IB) (BB)
※1	100K	270K
※2	100K	270K
※3	160K	180K
※4	160K	180K
※5	470P	270P
※6	470P	270P

(I) (IB) (BB)

C717 1/50V

R740 100K

R739 100K

C302 2.2/50V

R312 10K

R311 10K

R314 10K

R313 10K

Q301 Q302

Q301, Q302 2SD1450 (T)

C301 2.2/50V

R761 100

R764 10K

Q716 UN4212

C718 220/25V

Q54 2SB647 (C)

D54 HZ5B2

D55 HZ24-1L

C719 10/50V

Q52 2SC3311A (R)

Q51 2SB1375

R51 2.2 (FR)

R55 330

R54 100

R53 100

C53 47/25V

C52 100/16V

Q53 UN4212

D52 HZ12C2L

C57 47/25V

C827 0.01 (I) (IB) (BB)

R57 220 (1W)

C56 100/10V

D53 HZ6B1L

R56 390 (FR)

R58 2.7K

R52 2.7K

CN102

DC IN

FROM PCB-9 SECONDRY

Ⓓ Page32 K-5

PCB-4 SUB WOOFER

Q751 UN411L

PH701

R771 3.9K

R753 270

R752 47K

R751 47

J102 IN

REMOTE

OUT

J101

L

J103 SUB WOOFER

R

CN104 FROM PCB-10 HEADPHONE Ⓔ Page32 M-2

JL103

CN104

TO PCB-1 TUNER Ⓜ Page30 B-4

FROM PCB-1 TUNER Ⓛ Page30 L-2

R
L
PIN

FUNCTION SECTION

R-I
+12V
+5V
TU SW
P.ON
-Vcc

	UN4112	UN411L
R1	22K	4.7K
R2	22K	4.7K

	UN4212	UN4213
R1	22K	47K
R2	22K	47K

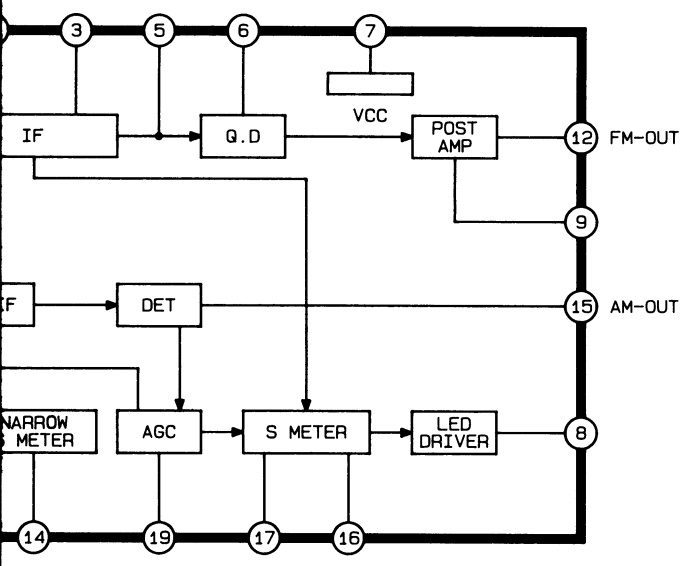
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2.5	12.5	12.5	5.2	3.6	2.5	2.2	3.3	0	1.5	1.4	0.1	0	2.5	1.5	0.8	4.0	4.0	4.0	3.2

13	14	15	16	17	18	19	20	21	22
0	—	—	1.1	—	—	0	0	2.5	5.1

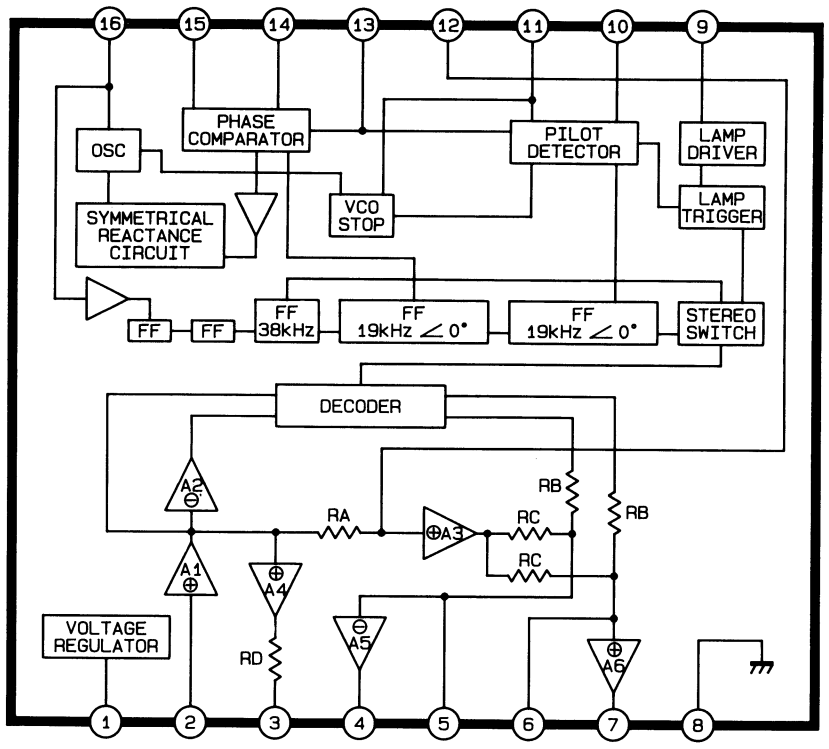
IC301

PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VOLT.	13.3	3.1	3.1	9.0	3.1	9.0	3.1	0	5.7	2.4	5.8	3.1	4.4	3.1	5.6	2.2

, and Det., AM Mixer and Osc.

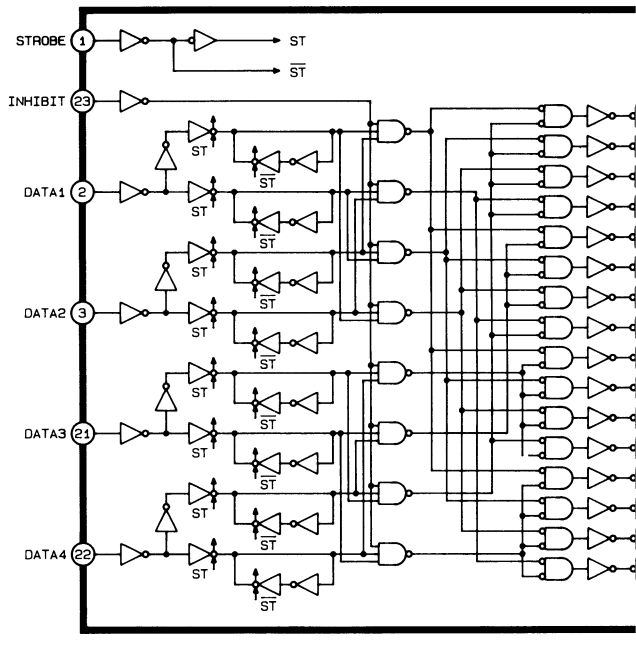


IC301 : LA3410 FM MPX



SCHEMATIC DIAGRAM

IC809 : TC4514BP Remote Control



FROM PCB-8 Ⓘ Page32 PRIMARY K-7

P.CONT P.INH +12V GND +5V P.ON — CN12

TUNER SECTION: +5V, +12V, R-I, P.ON, TU.SW, P.INH

TO PCB-1 TUNER Ⓛ Page29 M-4

TO PCB-6 TC Ⓝ Page32 C-2

MUTE — CN105

Q842 UN4212, Q843 UN4212

D891 1SS133, R891 100K, C893 0.1/50V

R892 47K, R895 47K, Q841 2SC3311A (R)

C897 470/10V, C898 0.1/50V, R899 47K, R900 47K, R896 4.7K, R897 4.7K

C891 100P, CX801 10K, C892 100P, D892 1SS133

IC809 TC4514BP REMOTE CONTROL

IC808 M50761-281P REMOTE CONTROL

D893 1SS133

R893 47K, R894 47K

Q845 UN4212, Q847 UN4212, Q846 UN4212, Q848 UN4212

IC810 LB1641 VOLUME MOTOR DRIVER

R901 820, CN15

PCB-16 VR IND: CW15, D15 S2410E1, DS

D894 HZ3-C2, C896 0.01 (MYL), C894 10/50V, R898 22

CN504: UP, DOWN — TO PCB-7 VR Ⓞ Page32 D-9

Q818 UN4112, R854 220K

D812 1SS133, D811 1SS133, C807 10/50V, D809 1S2473, D807 1SS133

R842 100K, R847 47K, R846 100K, R844 47K

IC804 TC4011BP INPUT SELECTOR

IC803 TC4011BP INPUT SELECTOR

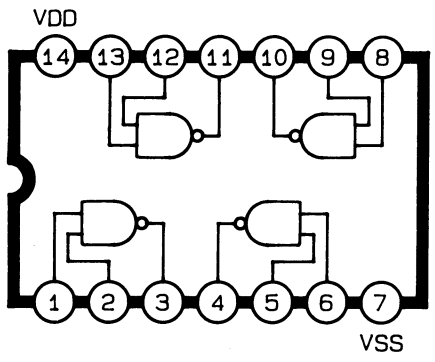
R841 4.7K, R851 100K, D813 1SS133, D815 1SS133, R843 10K

R855 220K, Q819 UN4112

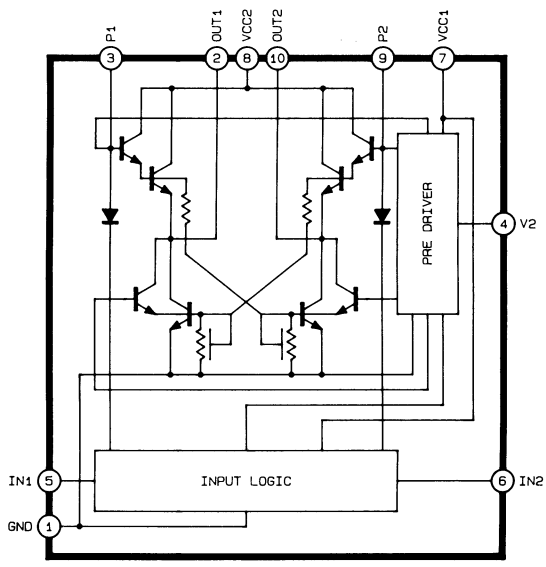
R845 100K, R848 1M, R849 100K, Q817 UN4112, R856 220K, R852 1M, R853 100K, R850 1M

FUNCTION GND, EQ GND, MONITOR GND

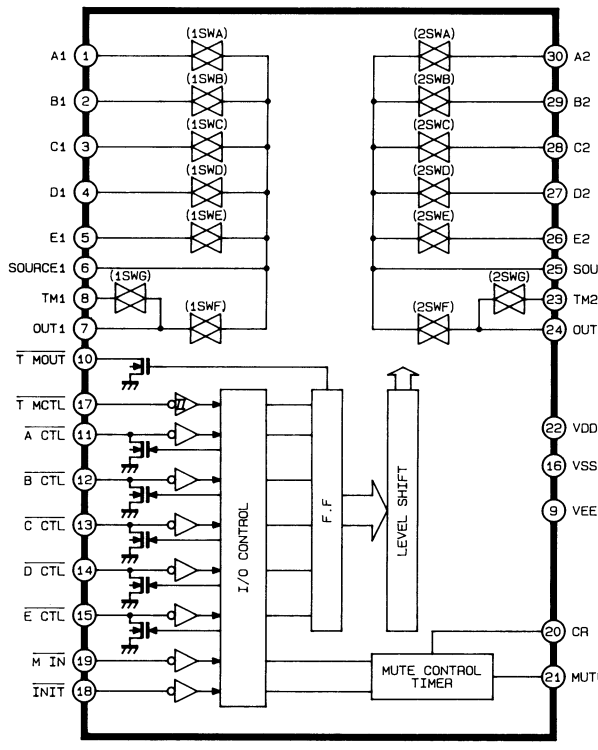
IC803, 804 : TC4011BP Input Selector



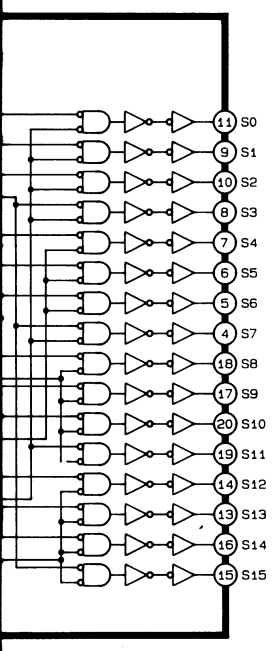
IC810 : LB1641 Volume Motor Driver



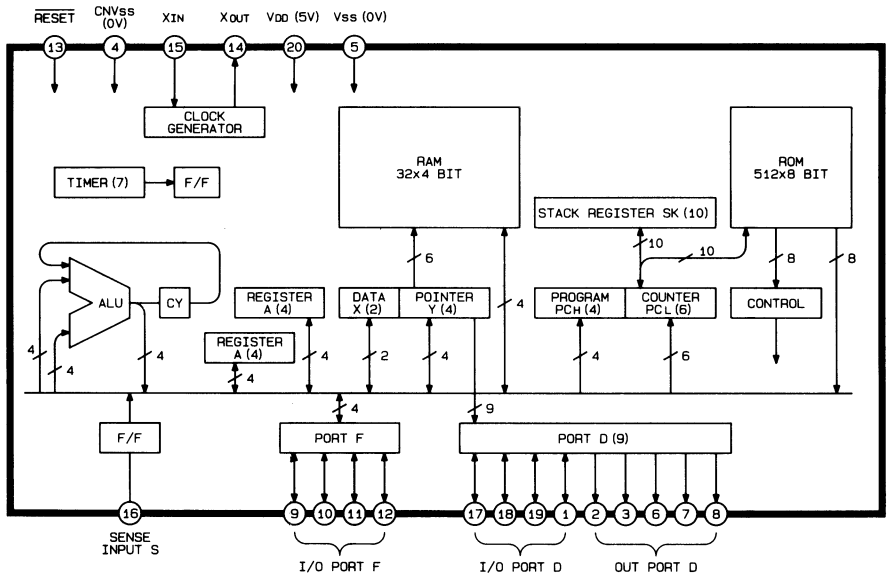
IC802 : LC7818 Input Selector



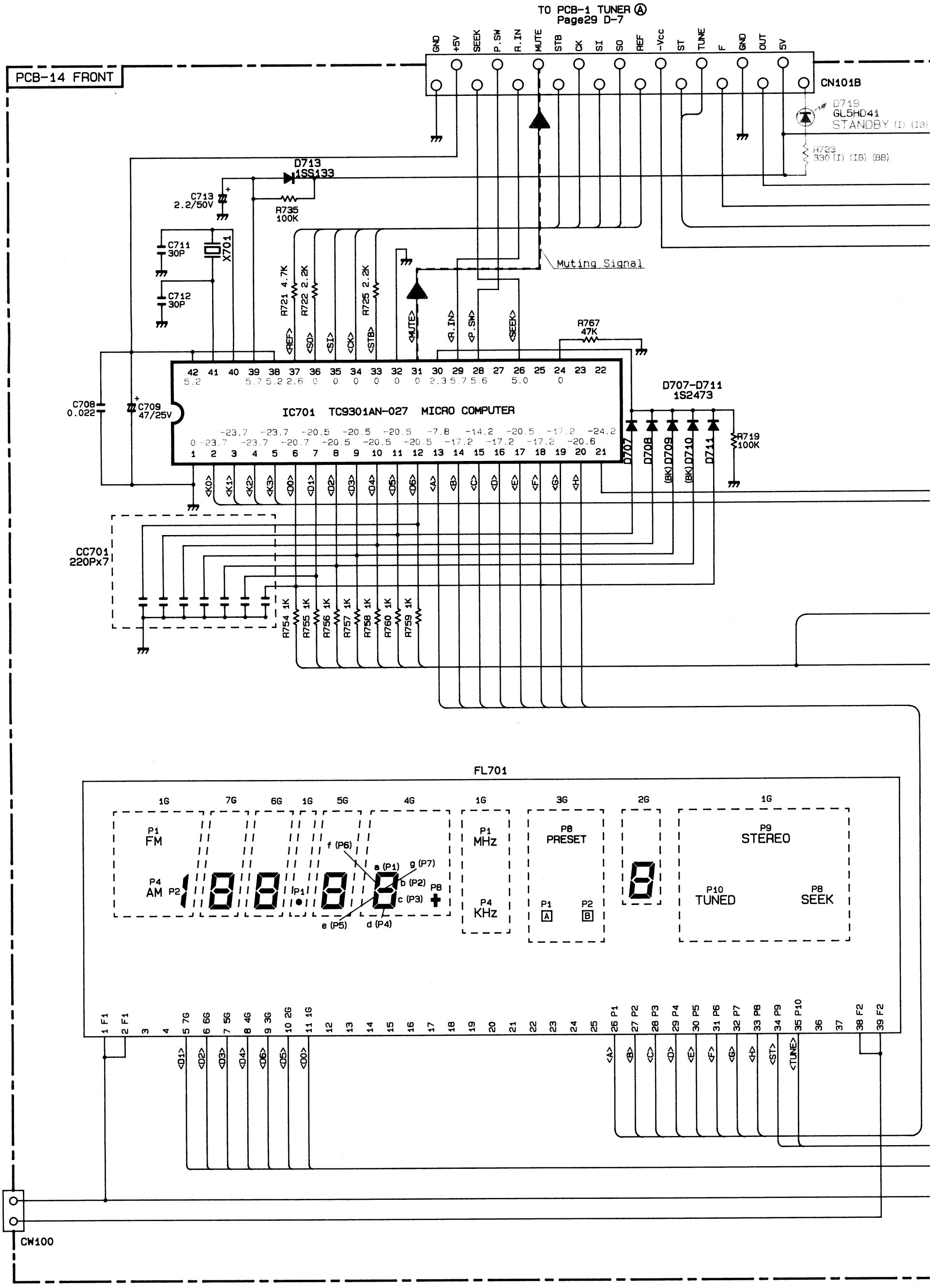
Control



IC808 : M50761-281P Remote Control



SCHEMATIC DIAGRAM



H I J K L M N

B
9
HD41
ANDBY (I) (IB) (BB)
IB) (BB)

<+5V>
<OUT>
RCV1

<K0> <K1> <K2> <K3>

<D0>
D701 1S2473
S11 M1
S12 M2
S13 M3
S14 M4

<D1>
D702 1S2473
S15 M5
S16 M6
S17 M7
S18 M8

<D2>
D703 1S2473
S20 SHIFT
S19 MEMO
S23 SEEK
D705 1S2473

<D3>
D704 1S2473
S21 FM
S22 AM

<D5>
D706 1S2473
S24 UP
S25 DOWN

Q802 2SA1309A (R)
Q801 2SA1309A (R)
12.9
14.8
0
R809 4.7K
R808 4.7K

D831-834 S2410E1

D830 1S2473
D836 S2210S1
D835 S2210S1
S36
S35
S34
S33
S32
S31
R839 1K
R806 1k
R805 1k
R804 680
R803 680
R802 680
R801 680

D727 1SS133
D725 1SS133
D723 1SS133
D721 1SS133
D825 1SS133
D824 1SS133
D823 1SS133
D822 1SS133

R830 4.7K
R838 470
Q809 2SC3311A (R)

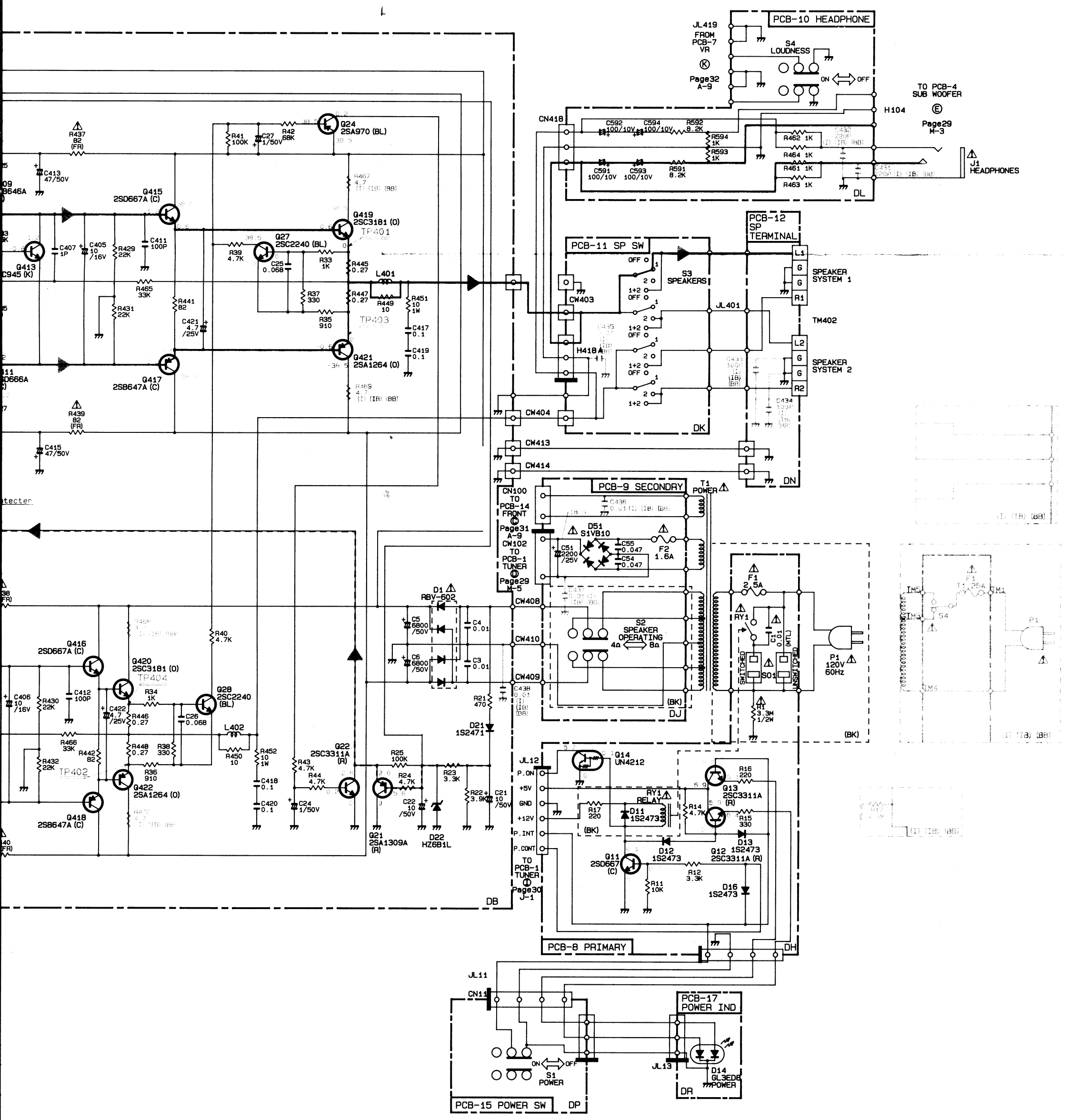
CN804A
+15V
GND
PHONO
CD
TU
VIDEO
MONI-RESET
TAPE2
TAPE1
VIDEO
TU
CD
PHONO
} LED

FROM PCB-1 TUNER
Ⓑ
Page30 E-3

38 F2
39 F2

TAPE1/COPY TAPE2 VIDEO TUNER CD PHONO

SCHEMATIC DIAGRAM


PCB-10 HEADPHONE
JL419
FROM PCB-7 VR
Page32 A-9
S4 LOUDNESS
ON OFF
TO PCB-4 SUB WOOFER
Page29 M-3
H104
CN418
C592 100/10V
C594 100/10V
R592 8.2K
R594 1K
R593 1K
C591 100/10V
C593 100/10V
R591 8.2K
R462 1K
R464 1K
R461 1K
R463 1K
J1 HEADPHONES
DL
PCB-12 SP TERMINAL
PCB-11 SP SW
S3 SPEAKERS
CW403
JL401
H418A
SPEAKER SYSTEM 1
SPEAKER SYSTEM 2
TM402
CW404
DK
CW413
CW414
DN
PCB-9 SECONDRY
T1 POWER
CN100 TO PCB-14 FRONT
Page31 A-9
CW102 TO PCB-1 TUNER
Page29 M-5
D51 S1VB10
C51 2200 /25V
C55 0.047
C54 0.047
F2 1.6A
F1 2.5A
RY1
SMITCHED
UNSMITCHED
S01
P1 120V 60Hz
S2 SPEAKER OPERATING 4Ω 8Ω
CW408
CW410
CW409
(BK)
DJ
D1 RBV-602
C5 6800 /50V
C6 6800 /50V
C4 0.01
C3 0.01
R21 470
D21 1S2471
R1 3.3M 1/2W
Q24 2SA970 (BL)
Q415 2SD667A (C)
Q419 2SC3181 (O)
TP401
Q27 2SC2240 (BL)
Q417 2SB647A (C)
Q421 2SA1264 (O)
Q413 C945 (K)
R41 100K
C27 1/50V
R42 68K
R437 82 (FR)
C413 47/50V
C407 1P
C405 10 /16V
R429 22K
C411 100P
R465 33K
R431 22K
R441 82
C421 4.7 /25V
R39 4.7K
C25 0.068
R33 1K
R37 330
R35 910
R445 0.27
R447 0.27
L401
R449 10
R451 10 1W
C417 0.1
C419 0.1
R467 4.7
R469 4.7
R439 82 (FR)
C415 47/50V
Q416 2SD667A (C)
Q420 2SC3181 (O)
TP404
Q28 2SC2240 (BL)
Q422 2SA1264 (O)
Q418 2SB647A (C)
C406 10 /16V
R430 22K
C412 100P
C422 4.7 /25V
R446 0.27
C26 0.068
L402
R450 10
R452 10 1W
C418 0.1
C420 0.1
R466 33K
R442 82
R432 22K
TP402
R448 0.27
R38 330
R36 910
R40 4.7K
Q22 2SC3311A (R)
R43 4.7K
R44 4.7K
C24 1/50V
R25 100K
R24 4.7K
C22 10 /50V
R23 3.3K
R22 3.9K
C21 10 /50V
Q21 2SA1309A (R)
D22 HZ6B1L
JL12
P.ON
+5V
GND
+12V
P.INT
P.CONT
TO PCB-1 TUNER
Page30 J-1
DB
Q14 UN4212
RY1 RELAY
D11 1S2473
R17 220
R14 4.7K
Q13 2SC3311A (R)
R16 220
R15 330
D13 1S2473
Q11 2SD667 (C)
D12 1S2473
Q12 1S2473 2SC3311A (R)
R12 3.3K
R11 10K
D16 1S2473
PCB-8 PRIMARY
DH
JL11
CN11
PCB-17 POWER IND
JL13
D14 GL3EDB POWER
DR
ON OFF
S1 POWER
PCB-15 POWER SW
DP